CITY OF CARDIFF.

ANNUAL REPORT

FOR 1914

OF THE

MEDICAL OFFICER OF HEALTH.

EDWARD WALFORD, M.D., D.P.H., F.R.MET.SOC.,

MEDICAL OFFICER OF HEALTH, CITY AND PORT OF CARDIFF;
SCHOOL MEDICAL OFFICER, CARDIFF EDUCATION AUTHORITY.

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CARDIFF:
S. GLOSSOP AND SONS, LTD., NEW STREET.

1915.

CITY OF CARDIFF.

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Deputy-Chairman :

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CITY OF CARDIFF.

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Medical Officer of Health :

EDWARD WALFORD, M.D., D.P.H.

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Health Visitors :

LILLY HUNTLEY.‡ BESSIE H. KING.‡ WINIFRED JONES.‡*

Chief Clerk :

THOS. CHANT.*

Clerks :

W. H. ALDERMAN. O. W. FUDGE.
A. J. GLOVER.* A. E. BRAIN.
A. G. CLARKE.

* Cert. Royal San. Inst.

‡ Cert. Health Visitor and School Nurse Royal San. Inst.

‖ Cert. Meat Insp. Royal San. Inst.

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CITY OF CARDIFF.

City Hall,
Cardiff,
June, 1915.

TO THE RT. HON. THE LORD MAYOR, ALDERMEN, AND MEMBERS OF THE CITY COUNCIL OF CARDIFF.

My Lord Mayor and Gentlemen,

I have the honour to present to you my twenty-seventh annual report. This report deals with the health of the City of Cardiff, and with the administrative work carried out in the department of the Medical Officer of Health during the year 1914.

The following is an extract from the General Order of the Local Government Board, dated 13th December, 1910, relating to the annual reports of medical officers of health :—

He shall as soon as practicable after the thirty-first day of December in each year make an Annual Report to the Council, up to the end of December, on the sanitary circumstances, the sanitary administration, and the vital statistics of the district.

In addition to any other matters upon which he may consider it desirable to report, his Annual Report shall contain the information indicated in the following paragraphs; together with such further information as we may from time to time require :—

(*a*)—An account of any influences threatening the health of the district, the prevalence of infectious or epidemic diseases therein, and the measures taken for their prevention.

(*b*)—An account of all general and special inquiries made during the year.

(*c*)—An account of the work performed by the Inspector of Nuisances during the year, including the statement supplied in pursuance of Article XX. (16) of this Order.

(*d*)—A statement as to the conditions affecting the wholesomeness of the milk produced or sold in the district.

(*e*)—A statement as to the conditions affecting the wholesomeness of foods for human consumption, other than milk, produced or sold in the district.

(*f*)—A statement as to the sufficiency and quality of the water supply of the district and of its several parts, and in areas where the supply is from waterworks, information as to whether the supply is constant or intermittent.

(*g*)—A statement as to the pollution of rivers or streams in the district.

(*h*)—A statement as to the character and sufficiency of the arrangements for the drainage, sewerage and sewage disposal in all parts of the district.

(*i*)—A statement as to the privy, water-closet, and other closet accommodation in the district, including information as to the approximate number of each type of privy and closet.

(*j*)—A statement as to the character and efficiency of the arrangements for the removal of house-refuse, and the cleansing of earthclosets, privies, ashpits, and cesspools in the district.

(*k*)—A statement with regard to the housing accommodation of the district as required by Article V. of the Housing (Inspection of District) Regulations, 1910, and an account of any other action taken by the Council under the Housing, Town Planning, &c., Act, 1909, bearing on the public health.

(*l*)—A statement as to the vital statistics of the district, including a tabular statement, in such form as we may from time to time direct, of the sickness and mortality within the district.

(*m*)—Where the Medical Officer of Health is appointed by the Council of a County Borough, or by a Council having delegated powers under the Midwives Act, 1902, a statement as to the administration of that Act in the district.

Section 132 of the Factory and Workshop Act, 1901, requires that the Medical Officer of Health shall report specifically on the administration of this Act in workshops and workplaces, and that he shall send a copy of this report to the Secretary of State.

The report also includes a statement prepared by the Inspector of Nuisances, who is required by the Board's General Order, Article XX. (16), to furnish the Medical Officer of Health with a tabular statement containing the following particulars :—

(*a*) The number and nature of inspections made by him during the year.

(*b*) The number of notices served during the year, distinguishing statutory from informal notices.

(*c*) The result of the service of such notices.

PHYSICAL FEATURES OF DISTRICT.—The City of Cardiff comprises 6,373 acres of land and inland water, exclusive of foreshore and tidal water, and is situated upon impervious strata, consisting for the most part of new red marl ; resting upon this formation are the more superficial deposits of river gravel, more or less saturated with water. A gradual rise in the gravel takes place towards the north, so as to attain a level of nearly 40 feet above Ordnance Datum in Queen Street and the Newport Road, and 50 feet at Cathays, where resting on the red marl, it forms a deposit to a depth varying from 8 to 20 feet of good building land, upon which the greater part of the north-east side of the town is constructed. The part of the town situated on the west of the River Taff is, in the northern or Canton District, on an alluvial deposit of clay, sand, and gravel ; the southern or Grangetown ward being on the estuarine mud—a stiff blue clay of marine origin, which forms also the soil in the neighbourhood of the Docks and South Splott. This low-lying part of the town is now protected from the sea and tidal waters by banks, and has in many parts been raised by the deposit of made soil composed of ashes and house refuse collected by the public scavengers. The southern part of the town therefore consists of alluvial land at a very slight elevation above the ordinary sea level near the mouths of the Rivers Rhymney, Taff, and Ely.

The Rhymney and Ely Rivers, at the points at which they enter the Bristol Channel, form respectively the eastern and western limits of the City ; the Taff flowing in a southerly direction forms a natural division of the town into east and west, each having a separate drainage system.

The area of the City of Cardiff is distributed in Registration Sub-Districts as follows :—East Cardiff, 481 acres, Central Cardiff, 3,832 acres, and West Cardiff, 2,060 acres. The City is also divided into ten municipal wards containing the civil parishes of Canton, Roath, St. John, and St. Mary.

Cardiff is well provided with parks and open spaces, forming admirable recreation grounds and breathing spaces for the inhabitants of the crowded parts of the town. Those places, which belong to the public and are under the control of the Cardiff Corporation, comprise a total area of about 300 acres, as follows :—

	Acreage. Exclusive of Roads. Acres.	r.	p.
Roath Park	100	0	0
Victoria Park	19	2	36
Canton Park	12	0	0
Loudoun Square ...	1	1	36
Howard Gardens ...	1	0	36
Adamsdown Square ...	0	1	32
Plasturton Gardens ...	0	2	39
Despenser ,, ...	0	3	23
Clare ,, ...	0	0	36½
Moorland ,, ...	1	2	5½
Grangetown ,, ...	3	0	31

	Acreage. Exclusive of Roads. Acres.	r.	p.
Llanbleddian Gardens ...	0	0	37
Ruthin Gardens ...	0	0	28
Senghenydd Gardens ... (North and South)	0	1	19
Windsor Esplanade Gardens	0	1	18
Penylan Gardens ...	6	0	0
Waterloo Gardens ...	3	0	0
Splott Park	18	0	0
Llandaff Fields ...	70	3	2
Cathays Park	60	0	0
Allen's Bank Crescent Open Space	0	1	16

TOTAL ... 300 acres, 2 roods, 35 perches.

Sir David's Field (Thompson's Park) with an area of 8 acres, 3 roods, 19 perches, was presented to the Cardiff Corporation in the year 1912, by Mr. Charles Thompson.

Grangetown Recreation Ground, with an area of 9 acres, 2 roods, is rented by the Corporation.

In addition to the above-named parks and open spaces, the public has, through the generosity of the owner, access to the following parks :—

	Acres.	r.	p.
Sophia Gardens	43	0	25
Cardiff Arms Park	17	3	32

HOUSING OF THE WORKING CLASSES.—The Housing (Inspection of District) Regulations, 1910 (Article V.) Housing, Town Planning etc., Act, 1909, require that—" The Medical Officer of Health shall include in his Annual Report information and particulars in tabular form in regard to :—

1. The number of dwelling-houses inspected under and for the purposes of Section 17 of the Act of 1909.
2. The number of dwelling-houses which on inspection were considered to be in a state dangerous or injurious to health as to be unfit for human habitation.
3. The number of representations made to the local authority with a view to the making of closing orders.
4. The number of closing orders made.
5. The number of dwelling-houses the defects in which were remedied without the making of closing orders.
6. The number of dwelling-houses which after the making of closing orders were put into a fit state for human habitation, and
7. The general character of the defects found to exist.

The Report should also contain an account of any other action taken by the Council under the Housing and Town Planning Act bearing on public health.

It is the duty of the Local Authority under these Regulations to provide for a thorough inspection to be carried out from time to time, according to the varying needs or circumstances of the dwelling-houses or localities in the district. They are also to cause to be prepared from time to time by the Medical Officer of Health, or by an officer designated by them, but acting under his direction and supervision, a list or lists of dwelling-houses, the early inspection of which is in the opinion of the Medical Officer of Health desirable.

Under Section 17 (2) of the Act of 1909, it is the duty of the Medical Officer of Health to make official representation to the Local Authority of any dwelling-house which, in his opinion, is unfit for habitation, and if the dwelling-house appears to them to be in such a state as to be unfit, it is their duty to make a Closing Order.

The work of the inspection in connection with this Act has been carried out by the Chief Inspector of Nuisances, Mr. S. Evans, the officer appointed by the local authority for this purpose, who calls the attention of the Medical Officer of Health to any matters requiring his intervention. Altogether 2,150 dwelling-houses were inspected under the provisions of this Act during the year 1914.

The inspection is carried out in accordance with the provisions of the regulations, and therefore includes among other matters the following, namely :—

1. The arrangements for preventing the contamination of the water supply.
2. Closet accommodation.
3. Drainage.
4. The condition of the dwelling-house in regard to light, the free circulation of air, dampness, and cleanliness.
5. The paving, drainage, and sanitary condition of any yard or outhouses belonging to or occupied with the dwelling-house.
6. The arrangements for the deposit of refuse and ashes.
7. The existence of any room which would in pursuance of sub-section (7) of Section 17 of the Act of 1909 be a dwelling-house so dangerous or injurious to health as to be unfit for human habitation.
8. Any defects in other matters which may tend to render the dwelling-house dangerous or injurious to the health of an inhabitant.

Records of the inspections of the dwelling-houses made under and for the purpose of Section 17 of the Act contain information under a variety of headings, including the following :—

1. The situation of the dwelling-house, and its name or number.
2. The name of the officer who made the inspection.
3. The date when the dwelling-house was inspected.
4. The date of the last previous inspection and a reference to the record thereof.
5. The state of the dwelling-house in regard to each of the matters referred to in Article II. of the regulations.
6. Any action taken by the Medical Officer of Health, or other officer of the local authority, either independently or on the directions of the local authority.
7. The result of any action so taken.
8. Any further action which should be taken in respect of the dwelling-house.

The following tables relate in detail to the inspections, representations, and action taken under the Act.

TABLE I.

Statement regarding houses inspected under the Housing, Town Planning, etc. Act, 1909, during the year 1914 :—

Street.	Houses Inspected.	Notices re Defects served		Notices re Defects Complied with.		Houses with Rent exceeding £26 a year.	No Rent paid.	Tenants changed since December, 1909.
		Owners	Occupiers	Owners	Occupiers			
Avon Street	47	17	5	8	3	...	...	40
Adelaide Street	41	7	10	5	6	21	1	10
Adelaide Place	7	3	...	1	...	1	1	2
Agate Street	15	5	...	1	...	3	...	6
Atlas Road	43	20	...	8	...	15	...	17
Blackweir Terrace	29	3	4	...	2	...	...	18
Bedford Street	108	58	9	30	5	9	14	43
Bedford Place	8	2	...	1	...	1	1	...
Bertram Street	65	39	...	33	...	...	...	28
Cornelia Street	44	2	1	1	1	...	...	19
Catherine Street	26	19	3	9	2	...	1	11
Crichton Street	38	8	3	3	...	15	3	8
Copper Street	17	2	...	...	...	1	1	7
Coburn Street	110	20	5	7	2	8	7	44
Cathays Terrace	166	64	18	42	18	52	33	35
Cecil Street	71	23	...	15	...	1	4	28
Chester Place	13	9	...	9	...	13	...	1
De Croche Place	6	3	...	3	...	...	...	2
Dudley Street	25	4	7	4	5	13	3	8
Dudley Place	9	3	4	1	1	1	3	2
East Street	17	2	1	2	1	...	...	10
Elaine Street	12	1	...	1	...	...	...	5
Enid Street	28	4	1	2	1	...	...	11
East Wharf	3	...	...	...	...	...	...	1
East Terrace	21	4	5	3	5	2	1	11
Evelyn Place	2	2	1	1	...	...	...	...
Edward Place	12	1	...	...	...	11	...	1
Edward Stret	42	13	11	3	2	28	2	5
Flora Street	77	42	3	11	1	4	5	28
Fitzroy Street	24	2	5	...	2	...	...	12
George Street	48	21	5	10	2	35	2	5
Iron Street	27	12	...	7	...	1	...	9
Jonkers Court	3	2	1	...	...	...	...	2
John Street	9	...	...	...	...	...	...	4
Letty Street	50	28	3	15	...	4	1	19
Layard Street	56	6	3	4	1	...	...	28
Lead Street	26	8	...	1	...	1	4	3
Lewis Street	41	17	...	2	...	1	2	32
Louisa Street	48	21	6	6	2	11	3	13
Leckwith Road	81	33	3	24	1	17	9	18
Lincoln Street	38	20	2	13	...	...	...	22
Menelaus Street	28	3	...	3	...	...	...	16
Metal Street	80	18	...	9	...	24	12	15
Margaret Street	39	18	5	8	2	3	5	17
North Edward Street	4	...	...	...	...	...	1	1
Norfolk Street	19	12	...	4	...	...	...	8
Orbit Street	34	13	2	7	5	8	1	15

TABLE I.—(continued).

Street	Houses Inspected.	Notices re Defects served		Notices re Defects Complied with		Houses with Rent exceeding £26 a year.	No Rent paid	Tenants changed since December, 1909.
		Owners	Occupiers	Owners	Occupiers			
Portmanmoor Road	158	29	2	18	1	60	17	48
Penlline Street	11	6	2	5	2	2	...	3
South William Street	49	22	9	4	4	42	2	8
Star Street	1	...	...	...	...	1	...	...
Silver Street	20	2	...	1	...	1	2	7
Swansea Street	61	15	1	9	1	...	4	24
Surrey Street	18	11	1	7	...	...	2	8
Tavistock Street	5	3	1	2	1	2	...	1
Thesiger Street	66	13	1	7	1	...	6	28
Wharf Street	4	2	...	...	...	2	...	...
Totals	2,150	717	143	370	80	414	153	767

The notices referred to in the foregoing table were served under the Public Health Acts.

Only those houses let after the passing of the Housing, Town Planning, etc., Act, in December, 1909, at a rent not exceeding £26 a year can be dealt with under Section 15 (3) of the Act, as regards their being kept in all respects reasonably fit for human habitation.

It will be seen from Table I. that of 860 notices served during the year 1914, 410 remained uncomplied with at the end of the year; of these, 347 were served upon owners, and 63 upon occupiers.

Table II. shows that 63 Closing Orders have been made under the Housing, Town Planning, etc., Act, 1909, and that 51 Demolition Orders were made.

TABLE II.

Proceedings taken relating to houses considered to be unfit for human habitation under Section 17 of the Housing, Town Planning, etc. Act, 1909, to the end of the year 1914 :—

STREET	Representations by the Medical Officer of Health	Closing Orders made	Houses rendered fit for habitation after Closing Orders	Demolition Orders made	Houses rendered fit for habitation after Demolition Orders	Houses Demolished
Allen's Arch	3	3	...	3*	...	...
Angelina Street	1	1	...	1	1	...
Bute Lane	4	4†	...	...	...	...
Cairns Street	6	6	...	6	6	...
Canal Street	2	2	...	2	2	...
Court Road	1	1	1	...	...	...
Crown Court	6	2	...	2	...	2
Harris' Court	6	6	...	6	...	6
Little Frederick Street ...	1	1	...	1	1	...
Love Lane	2	2	...	2‡	...	...
Madras Street	1	1	1	...	...	...
Mary Ann Street (Cottages at rear of) Nora Street	2	2	...	...	...	...
North Loudoun Place ...	2	2	...	2	2	...
Roland Street	1	1	...	1	...	1
Roland Street, Rear of ...	2	2	2	...	...	...
Saltmead Road	1	1	...	...	...	...
Stanley Street	2	2	...	2	2	...
Williams Court (Canal Street)	17	17‖	...	14℔	...	13
Womanby Street... ...	4	2	...	4	...	4
	5	5	...	5	...	5
TOTALS ...	69	63	4	51	14	31

* Local Authority decided not to enforce the Demolition Orders.

† Local Authority decided not to make Demolition Orders, provided the houses are not used for human habitation.

‡ Further action deferred pending a scheme proposed by the owner for improving the locality in which the houses are situated.

‖ In three instances the Local Authority decided not to make Demolition Orders, provided the houses are not used for human habitation.

℔ In one instance the Local Authority decided not to enforce the Demolition Order.

TABLE III.

The following Table shows the number of habitable rooms in 6,456 houses in Cardiff, let at 10/- per week and under (inclusive), inspected during the years 1911, 1912, 1913 and 1914, and the rent paid for such houses :—

No. of Rooms.	Rent of House per week.																												Total No. of Houses		
	2/9	3/-	3/3	3/6	3/9	4/-	4/3	4/6	4/9	5/-	5/3	5/6	5/9	6/-	6/3	6/6	6/9	7/-	7/3	7/6	7/9	8/-	8/3	8/6	8/9	9/-	9/3	9/6	9/9	10/-	
2	...	1	2	6	2	21	1	18	1	21	...	3	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	80
3	1	1	6	...	...	9	...	18	7	14	13	7	1	2	...	...	3	1	...	1	...	...	...	...	...	...	...	1	...	...	85
4	3	1	...	...	124	4	2	47	7	212	34	195	22	189	55	206	89	188	24	53	6	31	2	11	...	11	2	5	...	5	1,528
5	...	...	...	...	...	3	...	52	...	81	9	27	1	70	13	116	49	189	31	86	12	48	4	23	3	30	...	12	...	17	876
6	...	...	...	...	...	...	1	8	5	69	1	74	3	139	14	363	58	505	57	337	30	478	54	353	43	280	25	126	12	173	3,208
7	...	...	...	...	...	...	...	1	...	2	...	2	1	3	...	9	2	50	2	28	...	62	1	104	8	109	21	37	17	116	575
8	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	5	1	1	...	32	...	3	...	12	...	5	2	19	83
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	8	...	1	...	4	17
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	3
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Total No. of Houses	4	3	8	6	126	37	4	144	20	399	57	308	28	408	82	696	201	938	115	506	48	656	61	494	54	450	48	187	32	336	6,456

Tables IV. and V. show the number of unfurnished rooms sub-let in 2,204 houses, let at rentals of 6/6 per week and under, and the number of furnished rooms sub-let in 191 houses and their weekly rentals.

In other words, out of 6,456 houses inspected, parts of 2,204 were sub-let unfurnished, and parts of 191 were sub-let furnished.

TABLE IV.

The following Table shows the number of habitable rooms in 2,234 tenements (parts of 1,563 houses included in Table I. which are sub-let unfurnished) and the weekly rent paid for such tenements :—

No. of Rooms	Rent of Tenement per Week.																			No. of Tenements	
	1/–	1/3	1/6	1/9	2/–	2/3	2/6	2/9	3/–	3/3	3/6	3/9	4/–	4/3	4/6	4/9	5/–	5/6	6/–	6/6	
1	13	3	103	8	126	3	68	...	41	...	6	...	6	...	...	...	1	1	...	...	379
2	1	...	17	1	48	2	148	17	389	22	458	32	265	5	39	3	27	2	1	...	1477
3	...	...	...	...	5	1	10	1	33	10	61	15	108	9	44	2	23	2	3	...	327
4	...	...	...	...	1	...	3	...	2	1	4	1	9	2	4	1	10	1	2	1	42
5	...	...	...	...	...	...	1	...	...	1	2	...	2	1	1	...	...	...	...	...	8
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
	14	3	120	9	180	6	230	18	465	34	531	48	390	17	88	6	62	6	6	1	2234

TABLE V.

The following Table shows the number of habitable rooms in 202 tenements (parts of 191 houses included in Table I., which are sub-let furnished), and the weekly rent paid for such tenements :—

No. of Rooms.	Rent of Tenement per Week.																	No. of Tenements.	
	2/–	2/6	3/–	3/3	3/6	4/–	4/6	4/9	5/–	5/3	5/6	6/–	6/3	6/6	7/–	8/–	9/–	10/–	
1	4	6	9	1	11	67	6	10	17	1	1	5	...	...	...	1	...	1	140
2	2	1	1	...	6	10	4	4	13	...	1	4	1	1	...	2	1	1	52
3	...	...	...	...	...	5	...	1	1	...	...	...	...	...	1	...	...	1	9
4	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
No. of Tenements.	6	7	10	1	17	82	10	15	31	1	2	10	1	1	1	3	1	3	202

During the routine inspection of the district in 1913, 83 cases of overcrowding were reported, and in 1914, 52 cases were found.

By the term overcrowding is meant cases in which the number of persons living in a room exceeds two, and in which the air space is less than 300 cubic feet per person. Judged by this standard, Cardiff cannot be regarded as an overcrowded town, as according to the Census Report of 1911, the percentage of the population living more than two in a room is comparatively low.

The following table gives this proportion in several towns in England and Wales.

TABLE VI.

Percentage of population living more than two in a room :—

	PER CENT.		PER CENT.
CARDIFF	4·8	Halifax	12·0
Merthyr Tydfil	10·5	Bradford	9·3
Swansea	10·7	Middlesborough	13·4
Aberdare	5·9	Hull	8·2
Rhondda	5·6	Worcester	4·9
Newport	5·4	Dudley	15·0
York	6·6	Birmingham	10·1
Wakefield	12·1	Hastings	5·5
Dewsbury	16·6	Eastbourne	4·5
Barnsley	10·0	Brighton	6·7
Sheffield	8·4	Newcastle-on-Tyne	31·6
Rotherham	8·2		
Huddersfield	12·8	England and Wales	9·1
Leeds	11·0	County Boroughs	9·4

Table VII. shows the number of houses and shops for which plans have been passed since 1881, and Table VIII. shows the density of population in the district.

TABLE VII.

Number of houses and shops for which plans have been passed since 1881 :—

PERIOD		PERIOD	
August, 1881, to August, 1892 ...	10,973	Year ended 31st August, 1903 ...	398
Year ended 31st August, 1893 ...	1,456	,, ,, ,, 1904 ...	228
,, ,, ,, 1894 ...	1,206	,, ,, ,, 1905 ...	389
,, ,, ,, 1895 ...	1,507	,, ,, ,, 1906 ...	291
,, ,, ,, 1896 ...	1,196	,, ,, ,, 1907 ...	222
,, ,, ,, 1897 ...	1,247	,, ,, ,, 1908 ...	307
,, ,, ,, 1898 ...	1,258	,, ,, ,, 1909 ...	377
,, ,, ,, 1899 ...	624	,, ,, ,, 1910 ...	307
,, ,, ,, 1900 ...	267	,, ,, ,, 1911 ...	208
,, ,, ,, 1901 ...	230	,, ,, ,, 1912 ...	325
,, ,, ,, 1902 ...	185	,, ,, ,, 1913 ...	325
		,, ,, ,, 1914 ...	413
Total	23,939		

TABLE VIII.

Density of population during the past ten years :—

Year	Persons per acre.*
1905	26·9
1906	27·2
1907	27·5
1908	27·8
1909	28·1
1910	28·4
1911	28·6
1912	28·9
1913	29·2
1914	29·5

*Calculated on the basis of estimates of the population, and on an area of 6,373 acres.

The most dense part of the City is in the central or older district. Probably the area having the largest number of houses per acre is that surrounded by Bute Street, Bute Terrace, Mary Ann Street, and Millicent Street ; this area includes 6·3 acres, and contains 206 houses, or 32·7 houses per acre.

Table I. gives the rentals of 6,456 houses inspected under the Housing, etc., Regulations made under the Act of 1909. From this it would appear that 24·0 per cent. of the houses inspected were let at rentals of 6/– per week and under.

As this inspection does not include all the small houses in the City, it is probable that the proportion of houses at these low rentals is much lower, and it is believed that about 7·5 per cent. of the workmen's dwellings in the town are let at 6/– per week and under, 18·2 per cent. at 6/– to 7/6 per week, about 21·7 per cent. at 7/6 to 9/–, and 24·5 per cent. at 10/6 to 13/– per week.

There is a shortage of small houses suitable for separate families of the working classes, let at rents which they can afford to pay, and the provision of such houses by the Corporation under Part III. of the Housing Act, 1890, would meet a want which is felt in this direction. Many houses in Cardiff are let at higher rents than can be afforded by working men, with the result that these houses, which are constructed to accommodate one family, are frequently occupied by two or more families, and cases of overcrowding occur from time to time.

It should be mentioned that although the percentage of the whole population in Cardiff living in an overcrowded condition is comparatively low (4·8 per cent. living more than two in a room), the number of tenements with more than two occupants per room, and upon this basis overcrowded, according to the Census of 1911, amounted to 1,126.

The advantage of the provision of houses for the working classes by the Corporation depends largely upon the nature of the control which they would exercise over the dwellings and their tenants by bye-laws and regulations, by the limitation of the number of occupiers, and by the maintenance of a high standard of living and sanitation.

On 10th December, 1912, the Local Government Board held a local inquiry at Cardiff into the application of the Corporation for sanction to borrow the sum of £5,676 for the purpose of erecting thirty workmen's dwelling houses in Kitchener Road and street works in connection therewith under Part III. of the Housing of the Working Classes Act, 1890. Sanction was subsequently given, and the houses have been erected and are all occupied.

The following regulations are in force with respect to these houses :—

RULES RELATING TO WORKMEN'S HOUSES PROVIDED BY THE CARDIFF CORPORATION.

"No tenant shall sub-let the house which he occupies or any part thereof, or take in lodgers, or allow any bedroom to be occupied by more than the number for which it is certified.

No tenant shall use the house which he occupies or any part thereof as a shop or workshop, or expose any goods or materials for sale or hire therein, without the written consent of the Corporation.

The tenant must keep all rooms, passages and landings in a clean condition, and sweep all floors regularly every day, and wash them when necessary and when directed to do so by the Corporation or any authorised official of the Corporation.

The tenant shall keep all windows clean and open for the purposes of ventilation, and must repair any windows broken during his tenancy, and must repair any damage to the rooms other than that arising from ordinary wear and tear.

The keeping of pigeons or fowls is prohibited.

The tenant shall place all house refuse in a suitable covered receptacle, at such time and in such situation as may be required by the Corporation."

By Order of the City Council.

December, 1914.

TABLE IX.

The following Table gives the number of houses in each Municipal Ward in Cardiff, as shown by the enumeration made in June, 1914, by the Inspectors in the Department of the Medical Officer of Health :—

Municipal Wards.	Dwelling houses, including Business Premises.				Lock-up Shops		Houses being Built.	Totals.
	Inhabited.	Occupied for Business Purposes only.	Vacant Houses. Number	Vacant Houses. Per Cent.	Occupied	Vacant.		
Central	1,814	423	33	1·8	367	19	6	2,662
South	1,605	221	21	1·3	26	2	5	1,880
Cathays	4,225	18	12	0·2	17	1	15	4,288
Adamsdown	1,958	36	15	0·7	13	...	...	2,022
Riverside	3,135	48	25	0·7	30	5	...	3,243
Canton	4,682	27	32	0·6	9	6	80	4,836
Grangetown	3,654	25	14	0·3	6	...	70	3,769
Roath	3,778	33	37	0·9	14	14	61	3,937
Park	4,626	68	42	0·9	35	1	7	4,779
Splott	2,921	29	24	0·8	5	...	11	2,990
TOTALS ...	32,398	928	255	0·7	522	48	255	34,406

WATER SUPPLY.—I am indebted to Mr. C. H. Priestley, M.Inst., C.E., the City Waterworks Engineer, for the following information, relating to the water supply of the district.

The water supply to the City, and to areas beyond the City boundaries, as provided by Act of Parliament, is a pure, soft water, derived from the gathering grounds on the old red sandstone formation, to the north of the South Wales Coalfield, about 35 miles from Cardiff, in the Taff Fawr Valley, Breconshire. The water is conveyed by gravitation from the storage reservoirs at Taff Fawr to the reservoirs at Llanishen and Lisvane, balancing reservoirs being placed at suitable situations along the line of the main conduit, with filter beds of sand, etc., at Rhubina and the Heath. At the latter place Candy's Polarite Filters are also in operation. The capacity of the storage reservoirs is as follows :—

Beacons Storage Reservoir	...	...	345,000,000	gallons.
Cantreff ,,	,,	...	323,000,000	,,
Llanishen ,,	,,	...	317,000,000	,,
Lisvane ,,	,,	...	80,000,000	,,

The high level service is supplied from Rhubina, at which place the works comprise filter beds and storage reservoirs, supplemented by a service reservoir and water tower at Penylan, supplied with water by gravitation from Rhubina.

The average annual rainfall at the Beacons Reservoir (elevation 1,340 feet) for the past 30 years was 78·18 inches, the total during 1914 being 90·63 inches.

The Cardiff Corporation obtained further powers to acquire land for an additional reservoir (No. 3 or "Llwynon") at Taff Tawr to meet the requirements of the increasing population. The construction of this reservoir was commenced in November, 1910, and it is anticipated that it will be completed in 1916.

The drainage area in connection with the new reservoir is 6,400 acres in extent, in addition to 4,000 acres already in use, and the total storage of water in the reservoirs will amount to 2,265,000,000 gallons, including 1,200,000,000 gallons, the capacity of the new reservoir, which will be sufficient for a population of considerably over 300,000 persons, allowing for a full and unrestricted use.

The water is of excellent quality, as will be seen from the following reports :—

CHEMICAL ANALYSIS OF SAMPLES OF CARDIFF WATER.

(All results are stated in parts per 100,000).

Sample	Reaction	Hardness	Chlorine	Ammonia		Nitrates	Oxygen Absorbed, 4 hours, 80° F.
				Free	Albuminoid		
Heath Filter	Faintly Alkaline	3·0°	0·8	·0008	·0040	Nil.	·066
Rhubina Filter...	Faintly Alkaline	3·1°	0·8	·0008	·0036	Nil.	·082
Llanishen Reservoir	Neutral	2·4°	0·8	·0010	·0054	Nil.	·123
Lisvane Reservoir	Neutral	2·45°	0·9	·0010	·0058	Nil.	·108
Cantreff Reservoir	Neutral	2·4°	0·8	·0012	·0074	Nil.	·164
Beacons Reservoir	Faintly Alkaline	2·3°	0·8	·0020	·0068	Nil.	·143

BACTERIOLOGICAL EXAMINATION OF SAMPLES OF CARDIFF WATER.

Sample	Total Organisms per c.c. growing at 37°C.	Relative Abundance of B. Coli
Heath Filter	2	No B. Coli in 50 c.c.
Rhubina Filter	62	No B. Coli in 50 c.c.
Llanishen Reservoir ...	8	No B. Coli in 50 c.c.
Lisvane Reservoir	152	Typical B. Coli in 50 c.c.
Cantreff Reservoir	136	Typical B. Coli in 2 c.c.
Beacons Reservoir	102	Typical B. Coli in 10 and 50 c.c.

VITAL STATISTICS. –The statistics in this report are based upon the Registrar General's estimate of the population of Cardiff for the middle of the year 1914, *i.e.*, 188,495. The population of the City enumerated at the Census of April, 1911, amounted to 182,259, being an increase of 17,926 over the census of 1901 (164,333). The increase in the population of the whole City during the ten years ended 31st March, 1911, was at the rate of 10·9 per cent. The excess of births over deaths during this period was 25,031. The number of births amounted to 50,853, and the deaths to 25,822, but the actual increase in the population according to the census returns was 17,926, or a difference of 7,105. This would imply a considerable migration of population from the City to the adjoining districts during the period in question. It will be seen on reference to Table X. that in the South and Adamsdown Wards there has been an actual decrease in the population, and that in the Central Ward the population has remained practically stationary.

Table XI. shows the decennial increase in the populations in suburban districts immediately adjoining Cardiff, in which a very substantial rate of increase is shewn, varying from 28·5 per cent. in Lisvane to 86·6 per cent. in Whitchurch.

TABLE X.

Decennial increase or decrease of population in each Municipal Ward in Cardiff :—

MUNICIPAL WARDS.	Increase (+) or Decrease (—) of population		Increase (+) or Decrease (—) per cent.	
	Between 1891–1901	Between 1901–1911	Between 1891–1901	Between 1901–1911
Central	— 1,062	+ 47	— 8·6	+ 0·4
South	— 399	— 201	— 3·7	— 1·9
Cathays	+ 3,999	+ 3,545	+ 27·5	+ 19·1
Adamsdown	— 2,046	— 201	— 12·6	— 1·4
Riverside	+ 2,224	+ 2,824	+ 14·9	+ 16·4
Canton	+ 6,561	+ 2,343	+ 49·8	+ 11·8
Grangetown	+ 8,850	+ 2,552	+ 75·4	+ 12·3
Roath	+ 2,405	+ 3,368	+ 19·7	+ 23·0
Park	+ 6,835	+ 2,158	+ 47·7	+ 10·2
Splott	+ 8,051	+ 1,491	+ 91·4	+ 8·8
Totals	+ 35,418	+ 17,926	+ 27·4	+ 10·9

TABLE XI.

Decennial increase or decrease of population in adjoining districts :—

PARISHES.	Increase (+) or Decrease (—) of population.		Increase (+) or Decrease (—) per cent.	
	Between 1891–1901	Between 1901–1911	Between 1891–1901	Between 1901–1911
Lisvane	+ 8	+ 73	+ 3·2	+ 28·5
Llandaff	+ 1,398	+ 3,365	+ 31·9	+ 58·2
Llanishen	+ 521	+ 521	+ 75·4	+ 42·9
Whitchurch	+ 1,543	+ 4,214	+ 46·4	+ 86·6
Totals	+ 3,470	+ 8,173	+ 38·8	+ 67·4

TABLE XII.

Area in acres of, and average number of persons per acre in, each Municipal Ward, in Cardiff :—

MUNICIPAL WARDS.	AREA IN ACRES.*	PERSONS PER ACRE.†
Central	457	24·8
South	163	62·0
Cathays	382	57·7
Adamsdown	172	81·3
Riverside	298	66·9
Canton	448	49·2
Grangetown	1,143	20·2
Roath	750	23·9
Park	539	43·2
Splott	818	22·4
Cardiff	5,170	35·2

* Excluding inland water, docks and foreshore.

† Calculated on the basis of the population according to the Census, 1911.

The following table gives the population of Cardiff according to the census returns since 1801. The increase shown between 1871 and 1881 was in part due to the extension of the boundaries of the Borough, by the inclusion of the districts of Roath and Canton, in the year 1875.

TABLE XIII.

Year	Census Population.
1801	1,870
1811	2,457
1821	3,521
1831	6,187
1841	10,077
1851	18,351
1861	32,954
1871	39,536
1881	82,761
1891	128,915
1901	164,333
1911	182,259

TABLE XIV.

The following table gives the population of Cardiff at various ages, estimated to the middle of the year 1914 :—

AGES.	PERSONS.	MALES.	FEMALES.
All ages	188,495	92,798	95,697
Under 5 years	20,806	10,404	10,402
5–10 years	20,373	10,114	10,259
10–15 ,, ...	19,126	9,274	9,852
15–20 ,, ...	18,425	8,861	9,564
20–25 ,, ...	17,751	8 440	9,311
25–30 ,, ...	16,599	8,078	8,521
30–35 ,, ...	14,889	7,332	7,557
35–40 ,, ...	13,263	6,661	6,602
40–45 ,, ...	11,658	5,861	5,797
45–50 ,, ...	10,176	5,231	4,945
50–55 ,, ...	8,034	4,121	3,913
55–60 ,, ...	5,851	2,971	2,880
60–65 ,, ...	4,345	2,197	2,148
65–70 ,, ...	3,289	1,592	1,697
70–75 ,, ...	2,124	929	1,195
75–80 ,, ...	1,128	485	643
80 years and upwards ...	658	247	411

The following is a Summary of the Vital Statistics for the year 1914 :—

Estimated Population ... 188,495

Births	4,783	Birth-rate per 1,000	25·3
Deaths	2,644	Death-rate per 1,000	14·0
Deaths under 1 year	523	Deaths under 1 year per 1,000 births ...	109

TABLE XV.

Table showing the number of deaths and death-rates per 1,000 from Zymotic, Respiratory and Tuberculous Diseases during the year 1914, compared with the average annual death-rates from these diseases during the preceding ten years (1904–1913) :—

Cause of Death	Number of Deaths	Death-rate per 1,000	Death-rate per 1,000, 1904-1913 (average)
Measles	61	0·32	0·33
Scarlet Fever	19	0·10	0·07
Diphtheria	42	0·22	0·14
Enteric Fever	12	0·06	0·04
Whooping Cough	73	0·38	0·25
Respiratory Diseases	460	2·44	2·02
Pulmonary Tuberculosis	230	1·22	1·29
Other Tuberculous Diseases	63	0·33	0·47

TABLE XVI.

Deaths and death-rate per 1,000 births from Diphtheria and Enteritis (under 2 years) :—

	Number of Deaths	Death-rate per 1,000 births	Death-rate per 1,000 births, 1904-1913 (average)
Diarrhœa and Enteritis (under 2 years)	96	20·0	20·6

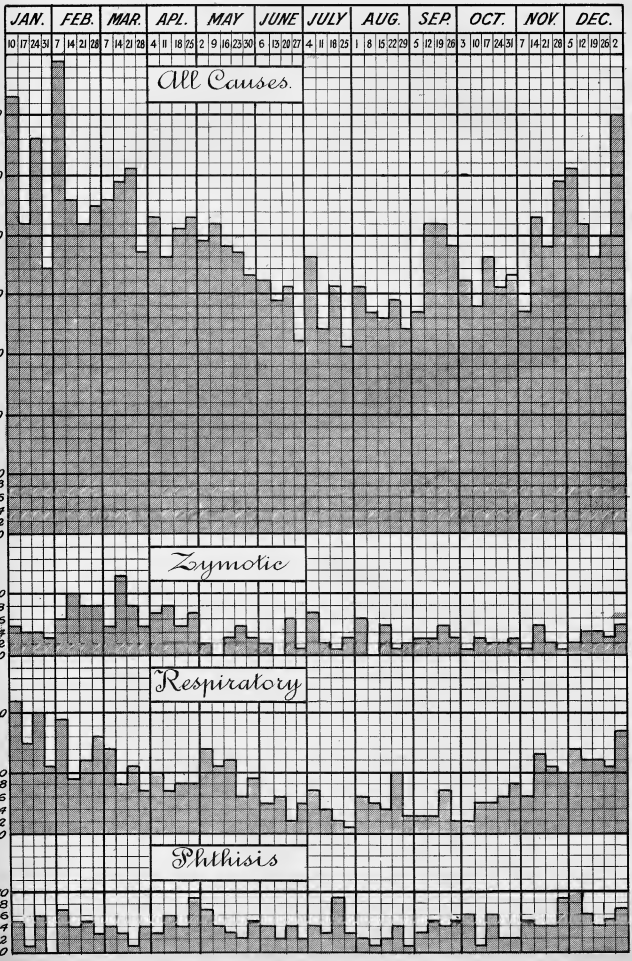
TABLE XVII.

Table showing the birth-rate and death-rate per 1,000 persons living, and rate of infant mortality in 1914, compared with the rates in 1913, the average rates for the ten years 1904–1913 in Cardiff, and the rates during the year 1914 in England and Wales and the 97 great towns :—

	Period	Birth-rate	Death-rate	Deaths under one year per 1,000 births
Cardiff	1914	25·3	14·0	109
Cardiff	1913	26·2	13·7	115
Cardiff	1904-1913	27·8	14·4	124
England and Wales ...	1914	23·8	14·0	104
96 Great Towns	1914	25·0	14·7	114

Diagram A.

SHOWING THE NUMBER OF DEATHS FROM ALL CAUSES, ZYMOTIC DISEASES (SMALL-POX, ENTERIC FEVER, SCARLET FEVER, DIPHTHERIA, WHOOPING COUGH, AND MEASLES) RESPIRATORY DISEASES AND PHTHISIS IN CARDIFF DURING EACH WEEK OF THE YEAR 1914.



MARRIAGES.—The return of the number of marriages in the City of Cardiff during the years 1904–1914, with the rate of persons married per 1,000 of the population, is given below :—

TABLE XVIII.

YEAR.	MARRIAGES.	RATE OF PERSONS MARRIED PER 1,000 living
1904	1,563	17·7
1905	1,650	18·8
1906	1,769	19·2
1907	1,743	18·5
1908	1,759	18·3
1909	1,803	18·4
1910	1,728	17·3
1911	1,646	18·0
1912	1,938	20·9
1913	1,976	21·1
1914	2,225	23·6

BIRTHS.—During the year 1914 the births registered in the City numbered 4,783; of these, 2,450 were males and 2,333 were females. The number of births corresponded to an annual birth-rate of 25·3 per 1,000 persons living. During the ten years ended 1891, the birth-rate in Cardiff averaged 39·9 per 1,000, as compared with 27·7, the average rate during the years 1904-1903.

The following table gives the annual number of births and the birth-rates in Cardiff in periods since 1852, from which it will be seen that a considerable decline in this rate has taken place during recent years.

TABLE XIX.

Period.	Number of Births.		Birth-rate per 1,000.	
1852–1861	1,144	Average	44·2	Average
1862–1871	1,364		37·7	
1872–1881	2,433		36·5	
1882–1891	4,166		39·9	
1892–1901	5,241		35·3	
1902–1911	5,049		28·9	
1912	4,597		24·9	
1913	4,900		26·2	
1914	4,783		25·3	

TABLE XX.

Showing the number of legitimate and illegitimate births, male and female, in each municipal ward during the year 1914 :—

Municipal Wards.	Legitimate.		Illegitimate.		Totals.		TOTALS.
	Males	Females	Males.	Females.	Males.	Females.	
Central	132	118	6	9	138	127	265
South	122	129	4	4	126	133	259
Cathays	306	278	8	8	314	286	600
Adamsdown	185	168	9	16	194	184	378
Riverside	167	189	22	21	189	210	399
Canton	331	300	11	14	342	314	656
Grangetown	372	378	6	11	378	389	767
Roath	226	210	7	12	233	222	455
Park	256	207	5	6	261	213	474
Splott	269	251	6	4	275	255	530
Totals	2,366	2,228	84	105	2,450	2,333	4,783

DEATHS.—The total number of deaths registered at all ages and from all causes in the City of Cardiff during the year 1914 amounted to 2,699, including non-residents who died within the district. This number corresponded to an annual death-rate of 14·3 per 1,000 persons living. If corrected by the subtraction of non-residents who died in public institutions in Cardiff, and by the addition of residents who died in institutions outside the City, the number is reduced to 2,644, and the death-rate to 14·0 per 1,000.

From Table XXI. it will be seen that a continuous decline in the death-rate has taken place since these rates were first recorded in 1852–1861, when the mean rate for the ten years reached 29·2 per 1,000.

The death-rate throughout the country as compared with that of Cardiff for the year 1914 is given below :

	Death-rate per 1,000 persons living.
England and Wales	14·0
97 Great Towns	14·7
145 Smaller Towns	12·9
England and Wales, less 242 towns	13·4
CARDIFF	14·0

TABLE XXI.

The following table gives the vital statistics in periods since 1852, and shows the marked decline in the general death-rate, in the death-rate from zymotic diseases, and in the birth-rate in successive periods :—

Years	Population	Births	Birth-rate per 1,000	Deaths	Death-rate per 1,000	Deaths from Zymotic Diseases	Zymotic Death-rate per 1,000
1852—1861 ...	25,889	1,144	44·2	756	29·2	222	8·58
1862—1871 ...	36,152	1,364	37·7	875	24·2	167	4·62
1872—1881 ...	66,639	2,433	36·5	1,335	20·0	218	3·27
1882—1891 ...	104,420 Means.	4,166 Means.	39·9 Means.	2,255 Means.	21·6 Means.	347 Means.	3·32 Means.
1892—1901 ...	148,606	5,241	35·3	2,674	18·0	355	2·39
1902—1911 ...	174,490	5,049	28·9	2,597	14·8	286	1·63
1912	184,633	4,597	24·9	2,563	13·9	362	1·96
1913	186,554	4,900	26·2	2,567	13·7	258	1·38
1914	188,495	4,783	25·3	2,644	14·0	314	1·66

TABLE XXII.

Showing the number of deaths and death-rates at various age periods during the last six years :—

Ages.	Number of Deaths.						Death-rate per 1,000 persons living at each age group.					
	1909	1910	1911	1912	1913	1914	1909	1910	1911	1912	1913	1914
Under 5 years	720	741	837	851	761	793	29·2	29·5	36·3	36·9	36·9	38·1
5 to 15 ,,	92	102	104	100	104	113	2·1	2·3	2·6	2·5	2·6	2·8
15 ,, 25 ,,	135	128	105	127	134	132	3·4	3·2	2·9	3·5	3·7	3·6
25 ,, 65 ,,	1,014	883	947	946	969	993	12·1	10·3	12·1	12·0	11·5	11·7
65 years and upwards ..	588	502	601	539	599	613	102·1	85·4	111·4	99·9	84·2	85·1
At all ages ...	2,549	2,356	2,594	2,563	2,567	2,644	14·2	13·0	14·1	13·9	13·7	14·0

Diagram B.

BIRTH-RATE AND DEATH-RATE PER 1,000 IN CARDIFF, 1875–1914

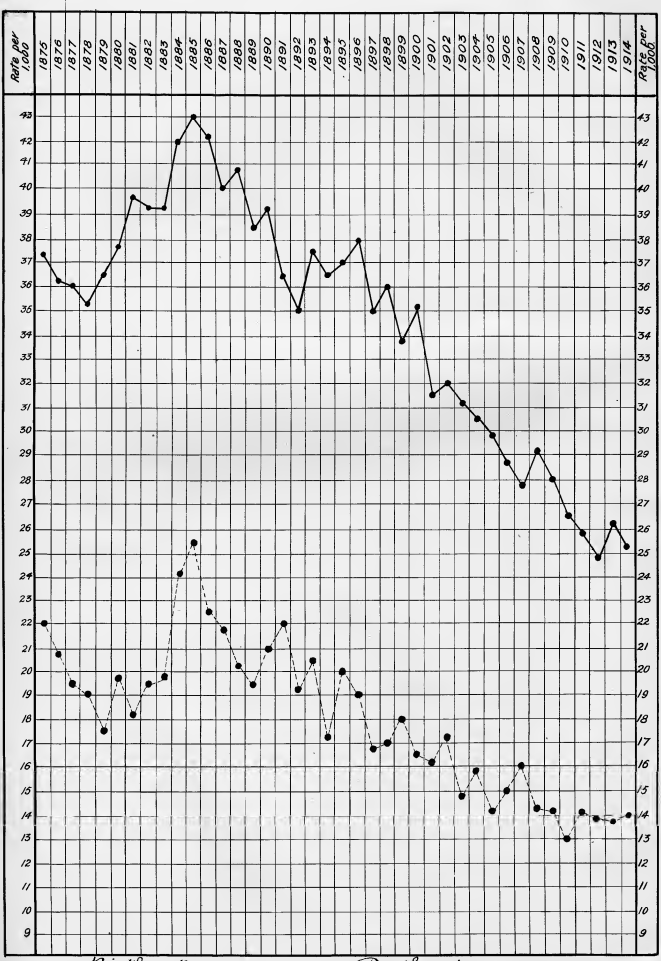


TABLE XXIII.

Death-rates from all causes per 1,000 persons living in the several municipal wards, the highest rate in each year being underlined :—

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Cardiff (Whole District) ...	14·2	15·0	16·0	14·3	14·2	13·0	14·1	13·9	13·7	14·0
Roath Ward	11·4	12·3	11·9	10·7	11·3	11·9	13·0	12·8	9·5	10·4
Park Ward	8·8	8·9	9·9	8·9	8·9	9·3	12·4	11·9	10·8	11·7
Splott ,, ...	12·5	13·9	13·7	13·2	10·7	12·9	12·9	14·0	14·2	17·8
Central ,, ...	14·0	14·4	15·2	12·8	13·0	20·4	22·1	21·0	19·4	22·9
South ,, ...	13·0	16·4	17·1	15·4	14·3	18·3	21·4	19·1	21·2	22·6
Cathays ,, ...	10·1	11·2	11·1	10·0	9·3	10·5	12·3	12·6	13·3	10·9
Adamsdown Ward ...	17·6	17·2	20·3	15·7	17·2	14·9	16·3	16·3	16·6	15·7
Riverside ,, ...	9·4	9·2	10·1	10·7	10·8	13·6	12·6	10·6	12·1	11·5
Canton ,, ...	9·8	9·9	10·4	10·3	10·0	10·7	12·7	12·9	12·0	12·9
Grangetown ,, ...	14·3	14·4	17·0	14·0	14·0	14·0	14·2	15·6	15·3	13·8

TABLE XXIV.

The following table gives the crude death-rates per 1,000 in several large towns in England and Wales during the years 1906–10, 1911, 1912, 1913 and 1914.

Towns.	Death-rate per 1,000				
	1906-1910	1911	1912	1913	1914
London	14·9	15·0	13·6	14·3	14·4
West Ham	15·5	15·8	14·1	14·7	14·8
Croydon	12·1	11·8	10·6	11·7	11·0
Brighton	14·8	13·8	12·7	13·7	13·2
Portsmouth	14·1	14·1	12·9	12·4	12·6
Plymouth	16·3	17·2	14·9	15·8	17·0
Bristol	13·9	15·1	13·3	12·8	13·0
Swansea	16·5	16·2	13·3	14·5	15·7
Wolverhampton	15·8	15·8	13·4	15·9	15·5
Birmingham	16·6	16·8	14·1	14·9	14·9
Norwich	15·0	14·1	12·7	14·1	13·6
Leicester	13·8	13·3	13·4	13·5	13·8
Nottingham	16·2	16·1	14·4	14·3	15·2
Derby	13·9	14·3	12·1	12·7	12·8
Birkenhead	15·4	15·6	14·3	14·6	15·1
Liverpool	19·6	20·0	18·1	18·2	19·4
Bolton	15·9	15·9	13·4	15·9	14·5
Manchester	18·1	17·0	16·0	15·8	16·6
Salford	18·2	16·7	16·5	15·2	16·5
Oldham	18·6	17·6	16·1	17·1	17·7
Burnley	17·7	18·0	14·7	16·7	16·1
Blackburn	16·3	16·1	14·2	15·8	14·6
Preston	17·9	16·9	16·6	17·2	15·6
Halifax	15·2	15·2	14·7	15·6	14·6
Bradford	15·3	14·9	14·4	15·1	15·5
Leeds	16·0	16·4	14·2	15·6	14·8
Sheffield	16·3	16·1	14·2	15·9	16·3
Gateshead	16·1	16·1	15·4	14·6	18·0
Newcastle-on-Tyne	16·5	16·1	14·2	15·2	17·0
Huddersfield	15·3	15·0	13·6	14·7	14·7
Hull	16·1	16·7	14·4	15·0	15·3
Sunderland	18·6	17·9	15·9	18·0	16·8
CARDIFF	14·4	14·1	13·9	13·7	14·0

TABLE XXV.—Analysis of Births and Deaths in the City of Cardiff, in Registration Sub-Districts, and in Municipal Wards, during the year 1914.

LOCALITIES	*Population	Area in Acres (Land and Inland Water)	Persons per Acre	Births		Deaths		Deaths under 1 Year		Seven Principal Zymotic Diseases	Principal Zymotic Diseases.														Phthisis, Pulmonary Tuberculosis		Other Tuberculous Diseases.		Respiratory Diseases		
											Small-pox		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Typhoid Fever		Diarrhœa								
				Number	Birth-rate	Number	Death-rate	Number	Number per 1000 Births	Number	Deaths	Death-rate	Deaths	Death-rate	Deaths	Death-rate	Deaths	Death-rate	Deaths	Death-rate	Deaths	Death-rate	Deaths	Death-rate	Deaths	Death-rate	Deaths	Death-rate	Deaths	Death-rate	
City of Cardiff ...	188,495	6,373	29	4,783	25·3	2,644	14·0	523	109	314	1·66	..	...	61	0·32	19	0·10	73	0·38	42	0·22	12	0·06	107	0·56	230	1·22	63	0·33	460	2·44
East Cardiff Registration Sub-District. Roath Ward ...	22,112	...	...	455	20·5	232	10·4	36	79	26	1·17	...	...	9	0·40	2	0·09	5	0·22	3	0·13	...	...	7	0·31	11	0·49	4	0·18	41	1·85
Park Ward ...	24,143	...	...	474	19·6	283	11·7	47	99	19	0·78	...	...	6	0·24	...	...	2	0·08	2	0·08	1	0·04	8	0·33	25	1·03	7	0·28	46	1·90
Splott Ward ...	17,891	...	...	530	29·6	313	17·8	85	160	59	3·29	...	...	17	0·95	4	0·22	12	0·66	...	...	3	0·16	23	1·28	20	1·11	7	0·39	65	3·63
East Cardiff	64,146	481	133	1,459	22·7	828	12·9	168	115	104	1·62	...	...	32	0·49	6	0·09	19	0·29	5	0·07	4	0·06	38	0·59	56	0·87	18	0·28	152	2·38
Central Cardiff Registration Sub-District. Central Ward ...	11,018	...	...	265	24·0	253	22·9	30	113	23	2·08	...	...	8	0·72	1	0·09	2	0·18	1	0·09	2	0·18	9	0·81	26	2·33	4	0·36	49	4·44
South Ward ...	10,161	...	...	259	25·4	230	22·6	31	119	17	1·67	...	...	1	0·09	3	0·29	6	0·58	1	0·09	1	0·09	5	0·49	35	3·44	5	0·49	31	3·05
Cathays Ward ...	23,854	...	...	600	25·1	262	10·9	54	90	24	1·00	...	...	2	0·08	3	0·12	2	0·08	6	0·24	2	0·08	9	0·36	21	0·87	8	0·33	42	1·76
Adamsdown Ward	13,439	...	...	378	28·1	212	15·7	53	140	24	1·70	...	...	2	0·14	...	...	11	0·81	2	0·14	...	...	9	0·66	14	1·04	6	0·44	39	2·90
Central Cardiff ...	58,472	3,832	15	1,502	25·6	957	16·3	168	111	88	1·50	...	...	13	0·22	7	0·11	21	0·35	10	0·17	5	0·08	32	0·54	96	1·64	23	0·39	161	2·75
West Cardiff Registration Sub-District. Riverside Ward...	18,311	...	...	399	21·7	212	11·5	31	77	22	1·20	...	...	2	0·10	...	...	6	0·32	8	0·43	1	0·05	5	0·27	19	1·03	4	0·21	33	1·80
Canton Ward ...	25,123	...	...	656	26·1	325	12·9	66	100	40	1·59	...	...	4	0·15	1	0·03	15	0·59	9	0·35	...	...	11	0·43	34	1·35	8	0·31	50	1·99
Grangetown Ward	23,243	...	...	767	32·9	322	13·8	90	117	60	2·38	...	...	10	0·43	5	0·21	12	0·51	10	0·43	2	0·08	21	0·90	25	1·07	10	0·43	64	2·75
West Cardiff	66,677	2,060	32	1,822	27·3	859	12·8	187	102	122	1·82	...	...	16	0·23	6	0·09	33	0·49	27	0·40	3	0·04	37	0·55	78	1·16	22	0·32	147	2·20

* The population of the whole city is that estimated by the Registrar-General, and the populations of the Registration Sub-districts and of the Municipal Wards are estimated on the basis of the number of inhabited houses in June, 1914

INFECTIOUS DISEASES.—The 2,644 deaths from all causes included 314 from the principal infectious diseases This number was equal to an inclusive death-rate from these diseases of 1·66 per 1,000 persons living, as compared with 1·96 the rate in 1912, and with 1·51 the average rate for the ten years 1903–1912.

The report of the Local Government Board on the number of cases of notifiable infectious diseases in England and Wales enables a comparison to be made of the incidence of these diseases in the several sanitary areas of England and Wales. The following table is compiled from the statistics contained in this report, and gives the number of cases of the principal infectious diseases in relation to the population of the areas concerned. This relation is given as the proportion of cases notified per 1,000 of the population, and is called the sickness-rate.

TABLE XXVI.

	Sickness-rate per 1,000.								
	Enteric Fever.			Scarlet Fever.			Diphtheria.		
	1912	1913	1914	1912	1913	1914	1912	1913	1914
England and Wales	0·23	0·22	0·24	2·98	3·57	4·47	1·24	1·39	1·61
England	0·23	0·22	0·23	2·95	3·51	4·38	1·24	1·39	1·60
Wales (including Monmouth) ...	0·21	0·23	0·17	3·35	4·52	5·40	1·27	1·40	1·53
Aggregate of County Boroughs :—									
England	0·28	0·25	0·24	3·46	4·26	4·74	1·32	1·48	1·54
Wales (including Monmouth) ...	0·25	0·18	0·13	3·46	5·05	5·90	1·84	1·86	2·02
Cardiff	0·31	0·15	0·15	2·59	4·89	5·77	2·94	3·02	3·2

The mortality from these diseases in Cardiff was distributed in each quarter of the year 1914 as follows :—

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.
Small-Pox	—	—	—	—
Measles	53	6	2	—
Scarlet Fever ...	5	5	4	5
Diphtheria	5	9	9	19
Enteric Fever ...	2	1	3	6
Whooping Cough ...	21	28	16	8
Diarrhœa ...	11	12	68	16

In the Registration Sub-Districts, the mortality during 1914 from these diseases was as follows :—

	No. of Deaths.	Death-rate per 1,000
East Cardiff	104	1·62
Central ,, ...	88	1·50
West ,, ...	122	1·82

TABLE XXVII.

Death-rates from Infectious Diseases per 1,000 persons living in Cardiff :—

	1875–80	1881–90	1891-1900	1901-1910	1911	1912	1913	1914
Small-pox ...	0·01	0·03	0·01	0·00	0·00	0·00	0·00	0·00
Measles ...	0·46	0·66	0·42	0·34	0·03	1·09	0·05	0·32
Scarlet Fever ...	1·00	0·41	0·17	0·10	0·08	0·04	0·09	0·10
Diphtheria ...	0·11	0·20	0·47	0·20	0·2	0·17	0·22	0·22
Whooping Cough	0·55	0·52	0·48	0·31	0·29	0·29	0·09	0·38
Enteric Fever ...	0·37	0·33	0·14	0·05	0·03	0·08	0·03	0·06
Diarrhœa ...	0·78	0·93	0·91	0·50	1·32	0·27	0·89	0·56

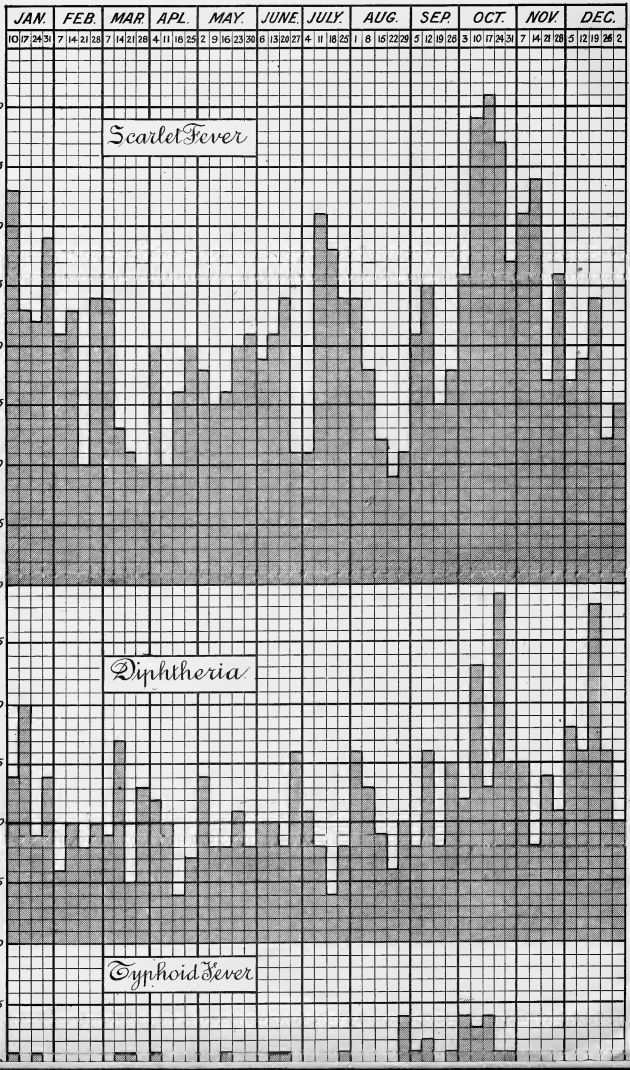
TABLE XXVIII.

The following table shows the number of cases of infectious disease notified in the City of Cardiff in each year since the adoption of the Infectious Disease (Notification) Act, 1889 :—

Year.	Small-Pox.	Diphtheria (including Membranous Croup)	Scarlet Fever.	Enteric Fever.	Typhus Fever.	Erysipelas.	Puerperal Fever.	Continued Fever.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	Totals
1890	—	72	335	150	—	45	4	2	—	..	608
1891	9	70	658	130	—	52	10	—	—	—	956
1892	5	164	1,851	118	—	95	12	3	—	—	2,248
1893	4	479	816	103	41	152	24	2	—	—	1,621
1894	10	343	577	62	1	135	19	3	—	—	1,150
1895	1	248	484	79	—	132	17	5	—	—	966
1896	45	306	874	74	1	134	21	7	—	—	1,462
1897	7	516	758	117	—	163	12	7	—	—	1,580
1898	—	960	332	80	—	133	18	6	—	—	1,529
1899	—	640	184	94	—	176	13	8	—	—	1,115
1900	4	714	383	95	4	106	15	5	—	—	1,326
1901	8	734	1,362	73	—	152	16	3	—	—	2,348
1902	2	701	1,433	69	—	169	13	7	—	—	2,394
1903	65	438	963	100	6	145	20	5	—	—	1,742
1904	11	406	658	40	—	112	12	2	—	—	1,241
1905	24	327	362	39	—	133	14	3	—	—	902
1906	2	333	776	77	—	117	17	1	—	—	1,323
1907	16	304	950	62	—	147	16	—	—	—	1,495
1908	—	291	475	55	—	167	15	1	—	—	1,004
1909	2	283	616	46	—	132	6	2	—	—	1,087
1910	1	363	887	36	—	137	8	—	346	—	1,778
1911	—	491	753	44	—	127	8	—	366	—	1,789
1912	—	536	472	56	—	170	11	—	499	—	1,744
1913	3	558	902	27	—	145	8	—	520	166	2,329
1914	3	620	1,086	29	—	125	11	—	353	81	2,508

Diagram D.

SHOWING THE NUMBER OF NOTIFICATIONS OF SCARLET FEVER, DIPHTHERIA AND TYPHOID FEVER IN CARDIFF DURING EACH WEEK OF THE YEAR, 1914.



CARDIFF SANATORIUM.

Report of the Medical Superintendent for the year 1914.

	0 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	55 to 65 years.	Totals.
Remaining in Hospital 27th Dec., 1913 :—								
Scarlet Fever	34	100	13	1	...	...	...	148
Diphtheria	2	24	4	1	...	...	...	31
Enteric Fever	...	...	4	...	2	...	...	6
Small Pox	...	...	...	...	...	...	...	...
Totals	36	124	21	2	2	...	...	185
Admitted during the year 1914 :—								
Scarlet Fever	182	490	76	26	8	1	...	783
Diphtheria	69	251	47	16	7	1	...	391
Enteric Fever	...	6	12	6	4	...	1	29
Small Pox	...	...	...	2	1	1	...	4
Totals	251	747	135	50	20	3	1	1,207
Totals under treatment in 1914	287	871	156	52	22	3	1	1,392
Of the above there were discharged :—								
(*a*) Recovered :—								
Scarlet Fever	167	508	81	23	8	1	...	788
Diphtheria	55	227	47	16	6	1	...	352
Enteric Fever	...	5	16	5	3	...	...	29
Small Pox	...	...	...	2	1	1	...	4
Totals	222	740	144	46	18	3	...	1,173
(*b*) Died :—								
Scarlet Fever	14	1	...	1	...	...	...	16
Diphtheria	8	12	...	...	1	...	...	21
Enteric Fever	...	...	...	...	3	...	1	4
Totals	22	13	...	1	4	...	1	41
Remaining in Hospital 26th Dec , 1914 :—								
Scarlet Fever	35	81	8	3	...	...	...	127
Diphtheria	8	36	4	1	...	...	...	49
Enteric Fever	...	1	...	1	...	...	...	2
Small Pox	...	...	...	...	...	...	...	...
Totals	43	118	12	5	...	...	...	178
Totals under treatment in 1914	287	871	156	52	22	3	1	1,392

Mortality per cent. under treatment :—

Scarlet Fever	1·71	Enteric Fever	11·4
Diphtheria	4·97	Small Pox	Nil.

B. W. BROAD, M.B., *Medical Superintendent.*

SMALL-POX.—Three cases of small-pox were notified during the year, none of which proved fatal.

Death-rate from small-pox in Cardiff since the year 1875 :—

YEARS.	DEATH-RATE PER 1,000
1875–1880	0·01
1881–1890	0·03
1891–1900	0·01
1901– 911	0·00
1912	0·00
1913	0·00
1914	0·00

I am indebted to the Vaccination Officer for the following return of vaccinations within the City during the years 1905–1914 :—

TABLE XXIX.

Year.	Successfully Vaccinated.	Insusceptible.	Postponed.	Certificates of Exemption and Statutory Declarations.	Died Unvaccinated.	Unaccounted for and left the town.
1905	4,422	14	79	65	527	561
1906	3,475	20	101	76	525	810
1907	2,804	13	87	89	418	1,843
1908	3,183	20	87	429	466	894
1909	3,066	18	35	545	369	1,012
1910	2,784	11	69	683	380	597
1911	2,107	25	83	745	416	466
1912	2,718	14	28	1,041	369	230
1913	2,487	12	30	938	362	292
1914	2,398	32	30	1,123	458	281

TABLE XXX.

The following table shows the condition as to vaccination amongst the notified cases of small-pox during the years 1906–1914.

Year.	No. of Cases.	No. of Deaths.	Vaccinated in Infancy.	Vaccinated later in life.	Re-vaccinated.	Un-vaccinated.
1906	10	2*	3	2	1	5
1907	15	1†	13	...	2	2
1908	...	...	...	...	...	...
1909	3	1*	1	1	...	1
1910	1	1†	1	...	...	...
1911	...	...	...	...	...	...
1912	...	...	...	...	...	...
1913	3	...	3	...	...	...
1914	3	...	2	1	1	...
Totals	35	5	23	4	4	8

* Unvaccinated. † Vaccinated in infancy

SCARLET FEVER.—Nineteen deaths were registered from scarlet fever during the year 1914, being equal to an annual death-rate of 0·10 per 1,000 persons living, as compared with 0·09 the rate in 1913, and with 0·07, the average rate in the ten years 1904–1913.

The mortality from scarlet fever throughout the country was as follows during the year 1914 :—

	Death-rate per 1,000.
England and Wales	0·07
97 Great Towns	0·09
145 Smaller Towns	0·07
Cardiff	0·10

The number of cases of scarlet fever notified during the year amounted to 1,086, the largest number notified in any year since 1907, when 950 notifications of this disease were received. The sickness-rate, or rate of notified cases per 1,000 of the population, amounted to 5·77, as compared with 5.90, the aggregate of the four County Boroughs in Wales and Monmouth. In these Boroughs the sickness-rates relating to this disease were as follows :—

Merthyr Tydfil	1·92 per 1,000
Newport (Mon.)	8·08 ,,
Swansea	7·24 ,,
Cardiff	5·77 ,,

The sickness-rate in England and Wales was 4·47, and the aggregate of the County Boroughs in England was 4·74 per 1,000.

The number of cases of scarlet fever notified during each quarter of the year in the three registration sub-districts were as follows :—

Registration Sub-districts.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Totals.
East Cardiff	72	68	57	104	301
Central ,, ...	78	67	89	89	323
West ,, ...	113	87	116	146	462

The age periods of persons notified to be suffering from scarlet fever and the percentage proportion of deaths to cases notified in each age period were as follows :—

Ages.	No. of Cases Notified.	Deaths.	Mortality per cent.
0– 1 year	11	2	18·1
1– 5 years	257	15	5·8
5–15 ,, ...	702	1	0·1
15–25 ,, ...	78	—	—
25–65 ,, ...	38	1	2·6

The following table shows the number of cases of scarlet fever notified in each year since 1891, and shows also the attack-rate, the death-rate, the proportion of deaths to cases notified, &c. :—

TABLE XXXI.

SCARLET FEVER.

Year.	Population.	No. of Cases Notified.	Attack rate per 1,000.	No. of Deaths.	Death rate per 1,000.	Percentage Removed to Hospital.	Mortality per cent. of Cases Notified.
1891	130,283	685	5·2	35	0·27	—	5·0
1892	132,895	1,851	13·1	87	0·65	13	4·7
1893	136,168	816	6·0	39	0·28	22	4·7
1894	139,519	577	4·1	8	0·05	31	1·3
1895	142,958	484	3·3	8	0·05	43	1·6
1896	146,479	874	5·9	28	0·19	48	3·2
1897	150,087	758	5·0	17	0·11	50	2·2
1898	153,783	332	2·1	8	0·05	56	2·4
1899	157,414	184	1·1	3	0·01	66	1·6
1900	161,452	383	2·3	11	0·06	65	2·8
1901	164,759	1,362	8·2	29	0·17	47	2·1
1902	166,473	1,433	8·6	36	0·21	48	2·1
1903	168,206	963	5·7	32	0·19	63	3·7
1904	169,957	658	3·8	25	0·14	72	3·3
1905	171,726	362	2·1	4	0·02	75	1·1
1906	173,512	776	4·4	3	0·01	74	0·4
1907	175,318	950	5·4	21	0·11	72	2·2
1908	177,143	475	2·6	10	0·05	78	2·1
1909	178,987	616	3·4	7	0·03	79	1·1
1910	180,849	887	4·8	19	0·10	78	2·1
1911	182,729	753	4·1	16	0·08	77	2·1
1912	184,633	472	2·5	8	0·04	81	1·6
1913	186,554	902	4·8	17	0·09	78	1·8
1914	188,495	1,086	5·7	19	0·10	72	1·7

Scarlet fever prevailed somewhat extensively throughout the City during the year, the number of cases notified being larger than in any year since 1907. The disease was generally of a mild type, the spread of the infection being favoured by many unrecognised cases attending school and mixing with other children. The proportion of deaths to cases notified was 1·7 per cent. It will be seen on reference to the tables, that the chief incidence of the disease fell upon children at school ages. Of the nineteen deaths, seventeen, or 84 per cent., occurred amongst children under 5 years of age ; of the 1,086 cases of scarlet fever notified, 783, or 72 per cent., were removed to the Cardiff Isolation Hospital. The relation of the infection to school attendance is referred to in the Annual Report to the Education Authority. There was no indication of milk infection during the year, although careful inquiry was made into the source of milk supply in each case.

DIPHTHERIA AND MEMBRANOUS CROUP.—Forty-two deaths were registered from these diseases during the year, corresponding to an annual death-rate of 0·22 per 1,000 persons living, as compared with 0·22, the rate in 1913, and with 0·14, the rate in the ten years 1904–1913.

The mortality from diphtheria throughout the country was as follows during the year 1914 :—

	Death-rate per 1,000.
England and Wales	0·14
97 Great Towns	0·16
145 Smaller Towns	0·16
CARDIFF	0·22

The number of cases of diphtheria and membranous croup notified during the year amounted to 620, as compared with 558 in 1913. The fatality, or proportion of deaths to cases notified, was 6·7 per cent. Of the cases notified, 391, or 63·0 per cent., were removed to the Cardiff Isolation Hospital.

Number and distribution of cases of diphtheria notified during each quarter of the year 1914 :—

Registration Sub-Districts.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Totals.
East Cardiff	46	21	34	44	145
Central ,, ...	48	49	27	47	171
West ,, ...	52	55	73	124	304

The number of notifications and the rate of fatality at various age periods during 1914, are shewn below :—

Ages.	Cases Notified.	Deaths.	Mortality per cent of cases notified.
0— 1 year	4 ...	3 ...	75·0
1— 5 years	109 ...	20 ...	18·3
5—15 ,, ...	388 ...	18 ...	4·6
15—25 ,, ...	68 ...	— ...	—
25 years and upwards ...	51 ...	1 ...	1·9

The following table shows the number of cases of diphtheria and membranous croup notified, the attack or sickness-rate, the death-rate, the proportion of deaths to cases notified, &c., in each year since 1891 :—

TABLE XXXII.

Diphtheria and Membranous Croup.

Year.	Population.	No. of Cases Notified.	Attack rate per 1,000.	No of Deaths.	Death rate per 1,000.	Percentage Removed to Hospital.	Mortality per cent. of Cases Notified.
1891 ...	130,283 ...	70 ...	0·5 ...	16 ...	0·12 ...	— ...	22 8
1892 ...	132,895 ...	164 ...	1·2 ...	36 ...	0·27 ...	— ...	21·9
1893 ...	136,168 ...	479 ...	3·5 ...	93 ...	0·68 ...	— ...	19·4
1894 ...	139,519 ...	343 ...	2·4 ...	59 ...	0·42 ...	— ...	17·2
1895 ...	142,958 ...	248 ...	1·7 ...	46 ...	0·32 ...	3 ...	18·5
1896 ...	146,479 ...	306 ...	2·0 ...	55 ...	0·37 ...	3 ...	17·9
1897 ...	150,087 ...	516 ...	3·4 ...	90 ...	0·59 ...	15 ...	17·4
1898 ...	153,783 ...	960 ...	6·2 ...	129 ...	0·83 ...	21 ...	13·4
1899 ...	157,414 ...	640 ...	4·0 ...	61 ...	0·38 ...	46 ...	9·5
1900 ...	161,452 ...	714 ...	4·4 ...	81 ...	0·50 ...	53 ...	11·3
1901 ...	164,759 ...	734 ...	4·4 ...	78 ...	0·47 ...	47 ...	10·6
1902 ...	166,473 ...	701 ...	4·2 ...	83 ...	0·52 ...	46 ...	12·5
1903 ...	168,206 ...	438 ...	2·5 ...	36 ...	0·21 ...	51 ...	8·2
1904 ...	169,957 ...	406 ...	2·3 ...	31 ...	0·18 ...	47 ...	7·6
1905 ...	171,726 ...	327 ...	1·9 ...	23 ...	0·13 ...	56 ...	7·0
1906 ...	173,512 ...	333 ...	1·9 ...	13 ...	0·07 ...	56 ...	3·9
1907 ...	175,318 ...	304 ...	1·7 ...	23 ...	0·13 ...	59 ...	7·6
1908 ...	177,143 ...	291 ...	1·6 ...	22 ...	0·12 ...	62 ...	7·5
1909 ...	178,987 ...	283 ...	1·5 ...	14 ...	0·07 ...	62 ...	4·9
1910 ...	180,849 ...	363 ...	2·0 ...	24 ...	0·13 ...	68 ...	6·6
1911 ...	182,729 ...	491 ...	2·6 ...	37 ...	0·20 ...	67 ...	7·5
1912 ...	184,633 ...	536 ...	2·9 ...	31 ...	0·17 ...	76 ...	5·7
1913 ...	186,554 ...	558 ...	3·0 ...	41 ...	0·22 ...	67 ...	7·3
1914 ...	188,495 ...	620 ...	3·2 ...	42 ...	0·22 ...	63 ...	6·7

It will be seen on referring to the tables that the attack or sickness-rate was above the average in England and Wales and the aggregate of the County Boroughs, whereas the case fatality was comparatively low. It may be inferred therefore that the disease as affecting this district was of an unusually mild type.

In County Boroughs the highest rates occurred in Great Yarmouth, 5·05; Southampton, 3·65; Norwich, 3·55, and Cardiff, 3·33. The lowest rates occurred in Oxford, 0·35; Dudley, 0·36; Blackburn and West Hartlepool, 0·46, and Wigan, 0·47.

During the year swabs were sent to the Cardiff and County Public Health Laboratory from the throats of 559 cases suspected to be diphtheria, the bacteriological examination giving positive results in 198 cases, and negative results in 361.

ENTERIC FEVER.—The number of deaths registered from enteric fever during the year amounted to 12, being equivalent to an annual death rate of 0·06 per 1,000 persons living, as compared with 0·03 in the year 1913, and with 0·05 the average death-rate in the ten years 1904–1913.

The mortality from this disease in the year 1913 throughout the country was as follows :—

	Death-rate per 1,000.
England and Wales	0·05
97 Great Towns	0·04
145 Smaller Towns	0·05
CARDIFF	0·06

The number of cases of enteric fever notified during 1914 was 29; of these 21, or 72·4 per cent., were removed to the Cardiff Isolation Hospital

The number of cases of enteric fever notified, the attack-rate, the death-rate, the proportion of deaths to cases notified, &c. since the year 1891, are shown in the following table :—

TABLE XXXIII.

ENTERIC FEVER.

Year.	Population.	No. of Cases Notified.	Attack rate per 1,000.	No. of Deaths.	Death rate per 1,000.	Percentage removed to Hospital.	Mortality per cent. of cases notified.
1891 ...	130,283 ...	130 ...	0·9 ...	26 ...	0·19 ...	— ...	20·0
1892 ...	132,895 ...	118 ...	0·8 ...	24 ...	0·18 ...	3 ...	20·3
1893 ...	136,168 ...	103 ...	0·7 ...	18 ...	0·13 ...	12 ...	17·4
1894 ...	139,519 ...	62 ...	0·4 ...	7 ...	0·05 ...	1 ...	11·2
1895 ...	142,958 ...	79 ...	0·5 ...	14 ...	0·09 ...	13 ...	17·7
1896 ...	146,479 ...	74 ...	0·5 ...	13 ...	0·08 ...	28 ...	17·0
1897 ...	150,087 ...	117 ...	0·7 ...	20 ...	0·13 ...	34 ...	17·0
1898 ...	153,783 ...	80 ...	0·5 ...	17 ...	0·11 ...	23 ...	21·2
1899 ...	157,414 ...	94 ...	0·5 ...	19 ...	0·12 ...	52 ...	20·2
1900 ...	161,452 ...	95 ...	0·5 ...	25 ...	0·15 ...	47 ...	26·3
1901 ...	164,759 ...	73 ...	0·4 ...	11 ...	0·06 ...	57 ...	15·0
1902 ...	166,473 ...	69 ...	0·4 ...	9 ...	0·05 ...	68 ...	13·0
1903 ...	168,206 ...	100 ...	0·5 ...	14 ...	0·08 ...	76 ...	14·0
1904 ...	169,957 ...	40 ...	0·2 ...	9 ...	0·05 ...	57 ...	22·5
1905 ...	171,726 ...	39 ...	0·2 ...	8 ...	0·04 ...	58 ...	20·5
1906 ...	173,512 ...	77 ...	0·4 ...	13 ...	0·07 ...	69 ...	16·9
1907 ...	175,318 ...	62 ...	0·3 ...	13 ...	0·07 ...	56 ...	21·0
1908 ...	177,143 ...	55 ...	0·3 ...	7 ...	0·03 ...	76 ...	12·7
1909 ...	178,987 ...	46 ...	0·2 ...	7 ...	0·03 ...	78 ...	15·2
1910 ...	180,849 ...	36 ...	0·1 ...	7 ...	0·03 ...	66 ...	19·4
1911 ...	182,729 ...	44 ...	0·2 ...	7 ...	0·03 ...	70 ...	15·9
1912 ...	184,633 ...	56 ...	0·3 ...	15 ...	0·08 ...	78 ...	26·8
1913 ...	186,554 ...	27 ...	0·1 ...	6 ...	0·03 ...	66 ...	22·2
1914 ...	188,495 ...	29 ...	0·1 ...	12 ...	0·06 ...	72 ...	41·3

The following table shows the death-rates per 1,000 from enteric fever in periods since the year 1875 in Cardiff :—

1875–80	1881–90	1891–1900	1901–1910	1911	1912	1913	1914
0·37	0·33	0·14	0·05	0·03	0·08	0·03	0·06

The age periods of the persons notified to be suffering from enteric fever during the year, and the percentage mortality are given in the following table :—

TABLE XXXIV.

Ages.	Cases Notified.		Deaths.		Mortality per cent. of cases notified (both sexes).
	Male.	Female.	Male.	Female.	
Years.					
1— 5	...	...	...	...	...
5—15	6	2	1	...	12·5
15—25	6	3	2	...	22·0
25—45	6	3	4	2	66·0
45—65	1	2	2	1	100·0
Totals ...	19	10	9	3	41·3

It will be seen that the attack or sickness-rate per 1,000 of the population was comparatively low. In England and Wales this rate amounted to 0·24; in the County Boroughs the average was 0·24, as compared with 0·15 in Cardiff. In the County Boroughs the highest rates occurred in Tynemouth, 0·94 ; Kingston-upon-Hull, 0·79 ; Portsmouth, 0·77 ; and Wigan, 0·76. The lowest rates were 0·02 in Burton-upon-Trent and Hastings ; 0·04 in Bournemouth, Carlisle, West Bromwich, Oxford and Smethwick. The sickness-rates from enteric fever in the County Boroughs of Glamorgan were as follows in 1914 :—Swansea, 0·10 ; Merthyr Tydfil, 0·15 ; Cardiff, 0·15.

The rate in Cardiff compares favourably with that in 1912, which amounted to 0·31, being in that year raised above the average in consequence of an outbreak of enteric fever in an institution in the City.

Of the twelve deaths registered from this disease during the year 1914, two were of soldiers who contracted enteric fever abroad and who were ill on arrival in Cardiff. Six of the other fatal cases probably owed their origin to some infection in districts outside the City where they were employed.

TUBERCULOSIS. — The deaths from all forms of tuberculosis during the year 1914 amounted to 293, including 230 from pulmonary tuberculosis or phthisis. The mortality from phthisis was equal to an annual death-rate of 1·22 per 1,000, as compared with 1·29, the average rate in the ten years 1904–1913.

The mortality from phthisis and other forms of tuberculosis in Cardiff since the year 1880 is shown in the following table :—

TABLE XXXV.

Year.	Deaths from Phthisis.	Deaths from Other Forms of Tuberculosis.	Death-rate per 1,000 (Phthisis).	Year.	Deaths from Phthisis.	Deaths from Other Forms of Tuberculosis.	Death-rate per 1,000 (Phthisis).
1880 ...	177	89	3·21	1898 ...	203	117	1·32
1881 ...	176	77	2·96	1899 ...	208	119	1·32
1882 ...	187	68	2·86	1900 ...	212	110	1·25
1883 ...	186	58	2·67	1901 ...	179	122	1·05
1884 ...	223	55	2·97	1902 ...	224	98	1·34
1885 ...	241	107	3·58	1903 ...	217	93	1·28
1886 ...	214	67	2·78	1904 ...	246	98	1·44
1887 ...	210	75	2·72	1905 ...	235	103	1·36
1888 ...	211	93	2·80	1906 ...	229	95	1·31
1889 ...	224	108	2·79	1907 ...	220	91	1·25
1890 ...	231	142	3·18	1908 ...	218	94	1·22
1891 ...	239	124	2·78	1909 ...	234	74	1·30
1892 ...	242	127	1·82	1910 ...	216	88	1·19
1893 ...	230	151	1·68	1911 ...	235	81	1·28
1894 ...	227	134	1·62	1912 ...	244	64	1·32
1895 ...	242	127	1·67	1913 ...	233	69	1·24
1896 ...	203	114	1·38	1914 ...	230	63	1·22
1897 ...	206	131	1·99				

TABLE XXXVI.

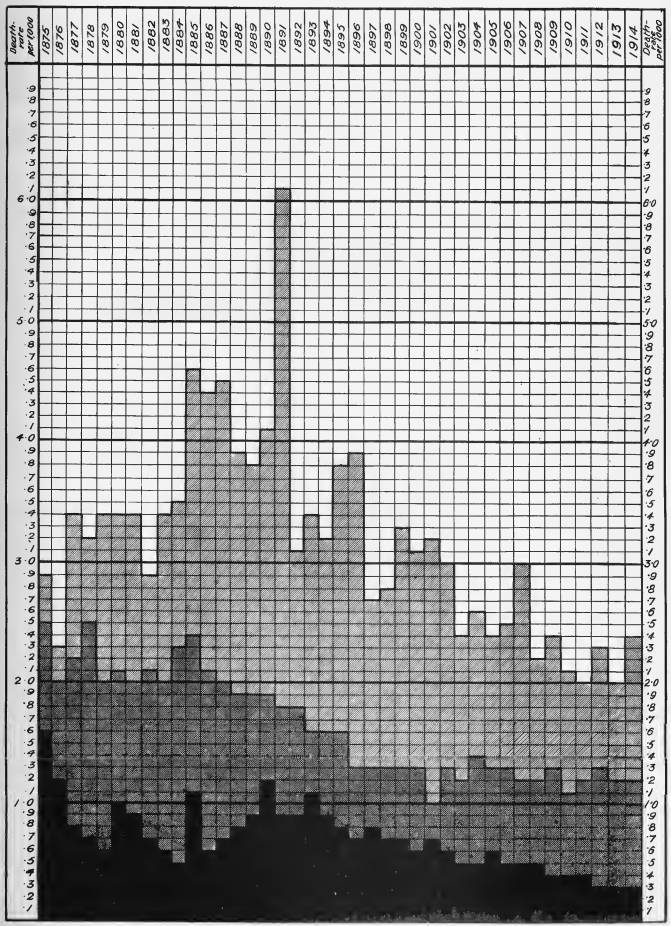
Death-rates from Phthisis per 1,000 persons living in the several Municipal Wards :—

	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
CARDIFF ...	1·28	1·44	1·36	1·31	1·25	1·22	1·30	1·19	1·28	1·32	1·24	1·22
Roath Ward	0·70	1·45	1·12	0·74	0·72	0·71	0·96	1·18	1·11	0·83	0·80	0·49
Park ,,	0·80	1·01	0·89	0·69	0·79	0·82	0·95	0·92	1·24	0·99	0·57	1·03
Splott ,,	0·60	0·54	0·96	1·12	0·59	0·81	0·69	0·76	1·19	1·09	0·86	1·11
Central ,,	1·60	1·83	1·43	1·23	0·62	1·22	0·81	1·77	3·44	2·64	3·04	2·35
South ,,	1·30	2·15	1·30	1·15	1·54	1·53	1·40	2·50	2·86	2·57	2·93	3·44
Cathays ,,	0·70	0·84	0·88	0·67	0·75	1·04	0·72	1·02	0·86	1·22	1·28	0·87
Adamsdown ,,	1·50	1·03	0·95	1·96	1·59	1·09	1·42	1·24	1·21	1·50	1·10	1·04
Riverside ,,	0·50	0·66	1·00	0·94	1·00	1·48	0·60	1·27	0·80	1·35	1·26	1·03
Canton ,,	0·50	0·88	1·17	0·78	1·02	0·76	0·98	1·05	1·04	1·17	1·29	1·35
Grangetown ,,	1·10	1·27	1·21	1·34	1·10	0·90	1·09	1·08	0·90	1·25	1·01	1·0

The new Public Health (Tuberculosis) Regulations, 1912, became operative on the 1st February, 1913. These regulations repeal the three series of regulations previously in force, they simplify the system of notification, and extend its operation to all forms of tuberculosis. The following is a statement relating to the notifications under these Regulations for the year 1914.

Diagram E.

SHOWING THE DEATH-RATES PER 1,000 OF THE POPULATION FROM RESPIRATORY DISEASES, PULMONARY TUBERCULOSIS AND OTHER TUBERCULOUS DISEASES IN CARDIFF, DURING THE YEARS 1875–1914.



Respiratory Diseases

Pulmonary Tuberculosis

Other Tuberculous Diseases

Diagram F.

SHOWING THE DEATH-RATES PER 100,000 FROM PULMONARY TUBERCULOSIS IN CARDIFF DURING THE YEARS 1894—1914.

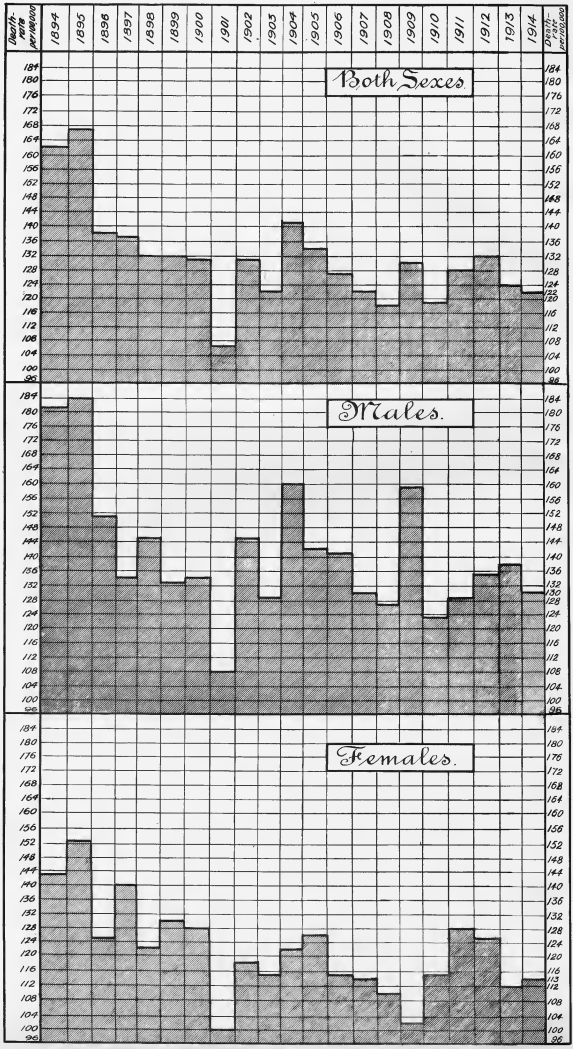


TABLE XXXVII.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications during the period 4th January, 1914—2nd January, 1915.

	Notifications on Form A.													Notifications on Form B.					Notifications on Form C.	
	Primary Notifications.												Total Notifications (i.e., including cases previously notified by other doctors).	Primary Notifications.				Total Notifications (i.e., including cases previously notified by other doctors).	Poor Law Institutions.	Sanatoria.
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 & upwards.	Total		Under 5	5 to 10	10 to 15	Total.			
Pulmonary :—																				
Males	1	4	3	2	17	28	48	49	23	12	2	189	327	...	1	...	1	1	14	73
Females	2	6	4	10	17	26	42	39	11	4	3	164	243	...	...	...	...	...	3	50
Non-Pulmonary :—																				
Males	3	10	6	6	5	8	6	...	...	...	...	44	56	...	4	3	7	8	...	7
Females	3	4	8	7	3	9	1	1	1	...	...	37	40	...	1	...	1	1	...	5
Totals	9	24	21	25	42	71	97	89	35	16	5	434	666	...	6	3	9	10	17	135

The following tables give an analysis of the cases of tuberculosis which have been notified to the Medical Officer of Health in the City of Cardiff during the year 1914.

TABLE XXXVIII.

Deaths from Pulmonary Tuberculosis and Other Forms of Tuberculosis—age periods and sex :—

Age Periods.	Deaths from Tuberculosis.					
	Pulmonary.			Non-Pulmonary.		
	Males	Females	Totals	Males	Females	Totals
Under 1 year	...	1	1	9	8	17
1 and under 5	3	4	7	9	11	20
5 ,, ,, 10	2	2	4	4	3	7
10 , ,, 15	6	9	15	3	2	5
15 ,, ,, 20	4	6	10	1	3	4
20 ,, ,, 25	17	21	38	...	1	1
25 ,, ,, 35	26	22	48	2	...	2
35 ,, ,, 45	27	27	54	1	3	4
45 ,, ,, 55	21	6	27	...	1	1
55 ,, ,, 65	16	6	22	1	1	2
65 and upwards	1	3	4	...	...	...
Totals	123	107	230	30	33	63

TABLE XXXIX.

Deaths from Pulmonary Tuberculosis and Other Forms of Tuberculosis in Municipal Wards :—

	Deaths from Tuberculosis.					
	Pulmonary.			Non-Pulmonary.		
	Males	Females	Totals	Males	Females	Totals
Central	13	10	23	2	2	4
South	30	10	40	2	2	4
Cathays	11	8	19	5	4	9
Adamsdown	7	7	14	2	3	5
Riverside	10	10	20	2	...	2
Canton	17	16	33	4	4	8
Grangetown	8	17	25	4	8	12
Roath	7	4	11	2	2	4
Park	13	12	25	5	2	7
Splott	7	13	20	2	6	8
Totals	123	107	230	30	33	63

TABLE XL.

Notifications of cases of Pulmonary Tuberculosis and Other Forms of Tuberculosis—age periods and sex :—

Age Periods.	Notifications of Tuberculosis.					
	Pulmonary.			Non-Pulmonary.		
	Males	Females	Totals	Males	Females	Totals
Under 1 year	1	2	3	3	3	6
1 and under 5	4	6	10	10	4	14
5 ,, ,, 10	3	4	7	6	8	14
10 ,, ,, 15	2	10	12	6	7	13
15 ,, ,, 20	17	17	34	5	3	8
20 ,, ,, 25	28	26	54	8	9	17
25 ,, ,, 35	48	42	90	6	1	7
35 ,, ,, 45	49	39	88	...	1	1
45 ,, ,, 55	23	11	34	...	1	1
55 ,, ,, 65	12	4	16	...	...	...
65 and upwards	2	3	5	...	...	...
Totals	189	164	353	44	37	81

TABLE XLI.

Notifications of cases of Pulmonary Tuberculosis and Other Forms of Tuberculosis in Municipal Wards :—

Municipal Wards.	Notifications of Tuberculosis.					
	Pulmonary.			Non-Pulmonary.		
	Males	Females	Totals	Males	Females	Totals
Central	27	21	48	5	4	9
South	19	10	29	2	4	6
Cathays	26	16	42	4	3	7
Adamsdown	14	13	27	6	3	9
Riverside	24	10	34	1	1	2
Canton	16	14	30	4	6	10
Grangetown	18	35	53	7	4	11
Roath	12	12	24	4	4	8
Park	19	15	34	4	5	9
Splott	14	18	32	7	3	10
Totals	189	164	353	44	37	81

The two foregoing Tables include all cases notified during the year, both under the Public Health (Tuberculosis) Regulations, 1912, and under the Regulations previously in operation.

TABLE XLII.

Cases of Tuberculosis visited by the Health Visitors—in Municipal Wards, and whether "insured" or "uninsured" persons, or "dependants."

Municipal Wards.	Insured.		Dependants.		Uninsured.		Totals.
	Males	Females	Males	Females	Males	Females	
Central	9	5	2	6	2	5	29
South	11	1	1	5	3	5	26
Cathays ...	20	2	4	9	1	6	42
Adamsdown ...	8	3	5	1	2	4	23
Riverside ...	13	2	2	3	...	4	24
Canton	11	7	1	9	7	1	36
Grangetown ...	19	11	5	12	5	4	56
Roath	10	5	1	5	3	1	25
Park	10	9	5	7	5	3	39
Splott	11	5	5	13	1	2	37
Totals ...	122	50	31	70	29	35	337

The foregoing Table relates to cases visited only. The difference between the number of cases visited and the number notified, is due to some of the notified cases being in sanatoria, hospitals, etc., and consequently unvisitable, and to others not being traced by the Health Visitors, *e.g.*, casual lodgers in lodging houses, etc.

Occupations of the 337 patients visited :—

Accountant	1	Collector	1
At Home	7	Cooks	3
Auctioneer's Assistant	1	Clerks	19
Bakers	1	Cinema Attendants	2
Barman	1	Coaltrimmers	3
Barmaids	2	Cranedriver	1
Blacksmith	1	Domestic Servants	6
Boilermakers	2	Dressmakers	7
Bootmakers	1	Dentist	1
Bottlewashers	2	Dockgateman	1
Brakesman	1	Dancer	1
Breadchecker	1	Drivers	2
Billiard Marker	1	Dockwatchman	1
Biscuit Grinder	1	Delegate	1
Brass Engraver	1	Engineer	1
Boiler Cleaner	1	Electrical Engineer	1
Buyer	1	Firebrigademan	1
Butchers	5	Flour Packers	3
Compositor	1	Farm Labourer	1
Chemist	1	French Polishers	2
Cashiers	2	Hair Dressers	1
Corporation Sweeper	1	Haulier	4
Chair-frame Maker	1	Hawker	1
Charwomen	5	Housewives	60
Coach Painter	1	Insurance Agent	1

Joiner (Ships')	...	...	1
Kitchen Maid	...	...	1
Labourers	...	...	16
Laundresses	...	...	2
Motor Man	...	...	1
Marble Polishers	..	..	2
Machinists	...	...	3
Newspaper Boy	...	...	1
Nursery Governess	...	...	1
Nurse Companion	...	...	1
No occupation	...	...	54
Not stated	...	...	10
Office Boys	...	...	2
Packer	...	...	1
Porters	...	...	2
Patent Fuel Workers	...	...	1
Photographers	...	...	1
Printers	...	...	2
Plasterers	...	...	1
Park Attendant	...	..	1
Pitprop Carrier	...	...	1
Restaurant Manager	...	...	1
Railwayman	...	...	1
Sawyer	...	...	1
Stonecutter	...	...	1
Seamen's Lodging-house Keeper	...		1
Ship's Fireman	...	...	6
School Children	...	...	13
School Teacher	...	...	1
Seamen	...	..	4
Shop Assistants	..	..	10
Stocktaker	...	...	1
Striker	...	...	1
Stableman	...	...	1
Springsmith	...	...	1
Stoker	...	...	1
Stonemason	...	...	1
Ship's Steward	...	...	3
Slate Foreman	...	...	1
Tailoresses	...	...	4
Telegraphist	...	...	1
Travellers	...	...	2
Tramway Foreman	...	...	1
Trained Nurses	...	...	2
Waitresses	...	...	2
Warehousemen	...	...	3
Total	...		337

In my annual report for 1913, a somewhat detailed account was given of the methods adopted in this district with a view of preventing the spread of tuberculosis, the relation of the Sanitary Authority to the work under the Insurance Act, and to the co-operation with the Welsh National Memorial Association, so that it is unnecessary to enter upon these matters on this occasion. I am indebted to Dr. Gilchrist, the Tuberculosis Physician for the Cardiff area, for much of the information contained in the several tables relating to the treatment of this disease, and I may mention that this town and neighbourhood are also much indebted to him for the excellent work which he has accomplished at the " Institute " or Tuberculosis Dispensary.

It is obvious that a complete and efficient scheme for dealing with Tuberculosis involves an intimate official association between the Medical Officer of Health and the Tuberculosis Officer, even when the latter is not, as in other parts of the United Kingdom, on the staff of the Medical Officer of Health. During the year under consideration this co-operation has continued uninterruptedly and with much advantage to the Health Department of this City, and to the Insurance Committee which administers the funds available for Sanatorium Benefit under the provisions of the National Insurance Act.

It is unnecessary to remind the Sanitary Authority again that however influential and important may be the work of a well organised body such as the Welsh National Memorial Association, their own responsibilities as the guardian of the public health are in no way diminished, as they alone possess the statutory powers for carrying out the preventive measures upon which the decline in the incidence of tuberculosis upon the community must ultimately depend.

Sleeping accommodation of 337 patients, as found by the Health Visitors at the time of the first visits :—

Patients with Separate Beds and Separate Rooms	127
Patients with Separate Beds but not Separate Rooms	46
Patients with neither Separate Beds nor Separate Rooms ...	132
Patients sleeping in Living Rooms	3
Not stated	29
Total	337

In 140 instances of the 337 cases visited, there was a definite history of relatives having been previously affected with the disease, as follows :—

Father	21
Mother	20
Brother	43
Sister	36
Husband	11
Son	4
Daughter	7
Paternal Relatives	18
Maternal Relatives	46
Other Relatives	29
Total	235

The total (235) is the number of relatives, as near as could be ascertained, the number of instances being 140.

Re-Visits.

Re-visits paid to cases notified prior to 1st January, 1914	434
Re-visits paid to cases notified during the year 1914	92
Total	526

TABLE XLIII.

Cases admitted to and discharged from Sanatoria and Hospitals according to notifications (Forms C. and D.) received under the Tuberculosis Regulations, 1912 :—

Age Periods	Admitted			Discharged		
	Males	Females	Totals	Males	Females	Totals
Under 1 year	...	...	...	...	...	...
1 and under 5	2	...	2	1	...	1
5 ,, ,, 10	4	1	5	2	2	4
10 ,, ,, 15	2	8	10	1	7	8
15 ,, ,, 20	7	8	15	6	13	19
20 ,, ,, 25	11	11	22	11	17	28
25 ,, ,, 35	27	14	41	27	14	41
35 ,, ,, 45	16	10	26	15	7	22
45 ,, ,, 55	16	5	21	12	4	16
55 ,, ,, 65	3	...	3	2	1	3
65 and upwards	...	...	...	...	...	...
Totals	88	57	145	77	65	142

TABLE XLIV.

Cases sent to and discharged from Sanatoria and Hospitals by the Welsh National Memorial Association :—

	Admitted				Discharged			
	Insured	Dependants	Uninsured	Totals	Insured	Dependants	Uninsured	Totals
Sanatoria	37	6	10	53	41	5	12	58
Hospitals	48	23	18	89	45	17	20	82
Totals ...	85	29	28	142	86	22	32	140

The above Table is compiled from notifications (Forms C. and D.) received under the Public Health (Tuberculosis) Regulations, 1912, and the figures given are included in Table XLIII.

Applications to the Cardiff Insurance Committee for Sanatorium Benefit and form of treatment recommended by the Committee :

Applications	225
Form of treatment :—	
Residential	114
Domiciliary	81
Institute (Dispensary)	149
No treatment	39

Many of the cases received more than one form of treatment ; the figures given above relate to the treatment recommended in all instances.

TABLE XLV.

New cases of Tuberculosis (residents of Cardiff) examined at the Tuberculosis Institute (Welsh National Memorial Association) :—

Age Periods.	Males	Females	Totals
Under 1 year	...	...	...
1 and under 5	3	1	4
5 ,, ,, 10	9	3	12
10 ,, ,, 15	6	10	16
15 ,, ,, 20	17	13	30
20 ,, ,, 25	16	17	33
25 ,, ,, 35	32	29	61
35 ,, ,, 45	27	17	44
45 ,, ,, 55	12	3	15
55 ,, ,, 65	6	2	8
65 and upwards	...	...	...
Totals ...	128	95	223

TABLE XLVI.

Distribution of Tuberculosis Institute cases in Municipal Wards and whether insured or uninsured persons :—

Municipal Wards	Insured	Uninsured	Totals
Central	10	10	20
South	6	6	12
Cathays	16	13	29
Adamsdown	10	9	19
Riverside	17	12	29
Canton	9	8	17
Grangetown	19	12	31
Roath	11	5	16
Park	16	14	30
Splott	19	11	20
Totals ...	123	100	223

INFANT MORTALITY.—The rate of infant mortality in Cardiff in the year 1914, calculated in the proportion of deaths under one year of age to 1,000 births registered, was at the rate of 109, compared with 115 in the year 1913, and with 122, the average rate for the ten years 1904—1913.

Rates of infant mortality throughout the country, as compared with that of Cardiff during 1914 :—

	Deaths under 1 year per 1,000 births.
England and Wales	105
96 Great Towns	114
145 Smaller Towns	104
England and Wales, less 242 towns	93
CARDIFF	109

Diagram G

DEATHS UNDER ONE YEAR PER 1,000 BIRTHS IN CARDIFF.

1885 — 1914

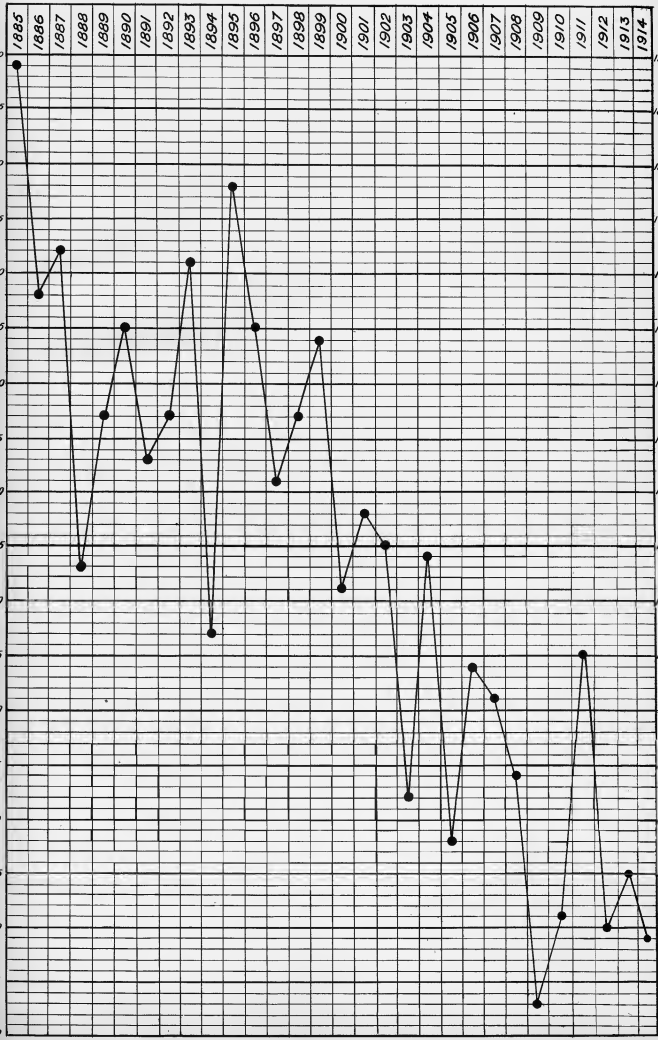


TABLE XLVII.

Rates of infant mortality in Cardiff compared with the rates in the large towns and in England and Wales during past years :—

Period.	Deaths under 1 Year per 1,000 Births.		
	Cardiff	Great Towns.	England and Wales.
1881—1890	165	162	141
1891—1900	161	172	153
1901	148	168	151
1902	145	145	133
1903	122	144	132
1904	144	160	146
1905	118	160	146
1906	134	145	133
1907	131	127	118
1908	124	128	121
1909	103	118	109
1910	111	115	106
1911	135	140	130
1912	110	101	95
1913	115	117	109
1914	109	114	105

From the foregoing table it will be seen that, comparing the rates of infant mortality in the two periods 1881–90 and 1891–1900, an actual increase is shown in the latter decennium, both in England and Wales as a whole and in the large towns. In Cardiff a slight decrease in the mortality is shown in the later period. Since the year 1900 there has been generally a steady, but not a very considerable, decline in this mortality throughout the country. With two exceptions, the rate of infant mortality in Cardiff was below the average in the large towns. In the year 1907, the rate was 131, as compared with 127 in the large towns, and in 1912 it was 110, as compared with 101.

TABLE XLVIII.

The following table shows the rates of infant mortality in the several municipal wards, the highest rate in each year being underlined :—

	Deaths under one year per 1,000 births.									
	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Cardiff (Whole District) ...	118	134	131	124	103	111	135	110	115	109
Roath Ward	104	114	121	115	105	127	135	88	93	79
Park ,, ...	70	98	95	97	77	72	117	60	100	99
Splott ,, ...	144	146	135	130	84	109	152	93	111	160
Central ,, ...	129	211	180	135	96	179	160	199	136	113
South ,, ...	135	159	176	140	154	148	213	129	121	119
Cathays ,, ...	95	99	107	99	78	105	120	107	125	90
Adamsdown Ward ...	149	153	134	114	160	125	117	126	129	140
Riverside ,, ...	112	110	109	128	89	112	132	80	77	77
Canton ,, ...	105	118	102	127	101	94	120	115	107	100
Grangetown ,, ...	134	151	159	133	110	114	132	142	143	117

TABLE XLIX.

The chief causes of death amongst infants under one year of age in Cardiff during the years 1905–1914 are shewn in the following table :—

Cause of Death.	Deaths under one year of age.									
	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Premature Birth ...	74	87	95	113	89	96	97	91	115	99
Diarrhœa and Enteritis	76	147	80	141	77	77	201	44	125	88
Pneumonia	56	44	83	46	42	46	39	59	38	46
Bronchitis	43	59	54	30	33	46	26	53	40	31
Whooping Cough	18	41	30	25	30	11	32	22	9	39
Tuberculosis (all forms)	38	42	22	29	22	24	25	15	20	18
Atrophy and Debility	75	83	86	80	61	63	57	60	73	63
Convulsions	64	47	47	52	55	44	41	31	42	38
Measles	19	...	35	2	7	16	1	42	2	8
Congenital Defects ...	20	18	11	18	26	22	20	15	13	18

TABLE L.

Infant mortality rates in thirty-three large towns :—

Towns.	Deaths under one year per 1,000 births registered.				
	1906–1910	1911	1912	1913	1914
London	114	129	90	105	104
West Ham	127	141	104	106	106
Croydon	97	106	76	93	80
Brighton	107	98	76	117	82
Portsmouth	110	126	82	90	84
Plymouth	127	145	107	124	125
Bristol	109	141	103	95	100
Swansea	144	136	100	127	141
Wolverhampton ...	129	135	88	130	114
Birmingham	145	164	112	128	122
Norwich	127	135	104	113	110
Leicester	137	132	110	119	120
Nottingham	152	162	117	129	145
Derby	111	123	79	101	92
Birkenhead	131	134	97	115	119
Liverpool	148	154	125	131	139
Bolton	136	163	98	144	119
Manchester	146	154	121	127	126
Salford	134	149	128	136	125
Oldham	139	160	117	139	137
Burnley	179	210	145	170	157
Blackburn	144	188	118	147	114
Preston	161	172	123	159	142
Halifax	81	123	81	101	101
Bradford	132	138	99	127	122
Leeds	134	158	101	133	123
Sheffield	138	140	106	128	131
Gateshead	142	136	103	122	147
Newcastle-on-Tyne ...	130	136	101	121	135
Huddersfield	107	132	96	102	111
Hull	136	155	101	128	120
Sunderland	136	151	115	134	134
CARDIFF	122	135	110	115	109

TABLE LI.

The following table indicates the difference between the mortality of legitimate and illegitimate infants in Cardiff during the years 1906–1914 :—

Year.	Births.		Percentage of illegitimate to total births.	Deaths under 1 year.		Deaths under one year per 1,000 births registered.		
	Total	Illegitimate		Total	Illegitimate	Total	Legitimate	Illegitimate
1906	5,001	172	3·4	675	59	134	127	343
1907	4,865	146	3·0	639	51	131	124	349
1908	5,172	193	3·7	644	63	124	116	326
1909	5,026	206	4·0	518	52	103	96	252
1910	4,822	191	3·9	537	57	111	103	298
1911	4,730	192	4·0	639	68	135	125	354
1912	4,597	169	3·6	509	45	110	104	266
1913	4,900	197	4·0	566	60	115	107	304
1914	4,590	193	4·2	523	42	109	109	217

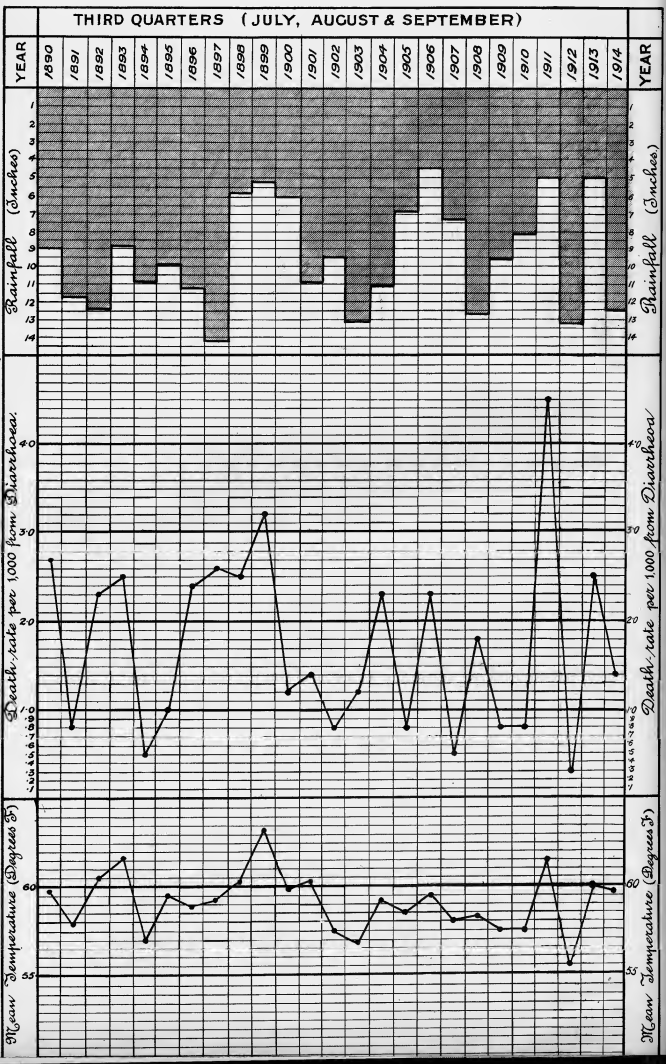
Table IV. in the Appendix gives the number of deaths from stated causes in weeks and months under one year of age during 1914. Summarising these tables for the years 1906–1914, the infant mortality at age periods per 1,000 births was as follows :—

TABLE LII.

Year.	Deaths per 1,000 births.				
	Under 1 week	Under 4 weeks	Under 3 months	3—6 months	6—12 months
1906	19·3	38·5	70·1	32·1	32·5
1907	23·6	39·0	65·3	22·6	43·4
1908	26·1	42·1	66·1	24·9	31·1
1909	22·2	37·0	56·5	18·9	27·6
1910	23·6	41·4	63·8	23·2	24·2
1911	23·6	41·0	64·4	30·4	40·1
1912	22·8	41·5	62·8	15·2	32·6
1913	26·3	42·2	65·5	23·2	26·7
1914	25·7	38·6	58·9	22·1	28·2

Diagram H.

SHOWING THE INFLUENCE OF THE RAINFALL AND MEAN TEMPERATURE ON THE DEATH-RATE PER 1000 FROM DIARRHOEA IN CARDIFF DURING THE SUMMER QUARTERS OF THE YEARS 1890–1914



In attempting to estimate the relative importance of the several factors concerned in the production of infant mortality, due regard must be paid to climatic and meteorological conditions, over which a sanitary authority has no control. The influence of these conditions is chiefly felt in the summer and autumn, when diarrhœal diseases amongst infants and young children prevail extensively, and are attended with a high rate of fatality. The rate of infant mortality in any one year depends, therefore, largely upon the amount and severity of these diseases during the summer months. Diagram H. shows very clearly the influence of temperature and rainfall upon the mortality from diarrhœa during the summer quarters (July, August, and September), and that the fluctuation in the annual rate of mortality amongst infants, depends to a great extent upon the meteorological conditions which prevail at this season. A hot and dry summer is found to be invariably associated with a comparatively high rate of infant mortality, whilst a cool summer, with abundant rainfall, has the effect of producing a low rate of mortality. Table LIII. also shows the effect of excessive temperature upon the mortality from diarrhœa.

The following table shows the number of days with high maximum temperatures, and the number of deaths from diarrhœa, in Cardiff, during the months of July, August and September, 1906-1914.

TABLE LIII.

Period.		Number of days with maximum temperature between									Deaths from Diarrhœa	
		°F. 50—55	°F. 55—60	°F. 60—65	°F. 65—70	°F. 70—75	°F. 75—80	°F. 80—85	°F. 85—90	°F. 90—95		
July,	1906	...	...	...	8	15	5	3	...	...	8	
,,	1907	...	...	3	12	7	2	6	1	...	3	
,,	1908	...	...	...	9	11	7	2	2	...	9	
,,	1909	...	...	3	17	10	1	...	...	...	2	
,,	1910	...	...	2	18	8	3	...	...	...	8	
,,	1911	...	...	...	3	3	8	9	6	1	20	
,,	1912	...	...	1	12	10	4	2	2	...	8	
,,	1913	...	...	1	7	13	7	3	...	...	5	
,,	1914	...	...	...	11	12	5	1	2	...	7	
August,	1906	...	...	...	4	14	9	1	3	...	32	
,,	1907	...	...	...	13	17	1	...	...	...	6	
,,	1908	...	...	3	10	11	6	1	...	...	44	
,,	1909	...	...	...	8	12	2	9	...	...	21	
,,	1910	...	...	1	15	12	3	...	...	...	16	
,,	1911	...	...	...	...	11	7	7	2	3	1	143
,,	1912	...	...	8	20	3	...	...	...	...	10	
,,	1913	...	...	...	2	15	10	4	...	...	57	
,,	1914	...	...	...	3	18	8	2	...	...	11	
September,	1906	...	...	...	12	14	1	1	2	...	70	
,,	1907	...	...	4	6	11	9	...	...	...	15	
,,	1908	...	1	12	12	4	1	...	...	...	33	
,,	1909	...	1	12	14	3	...	...	...	...	19	
,,	1910	...	...	6	16	8	...	...	...	...	17	
,,	1911	...	...	8	9	2	5	3	2	1	44	
,,	1912	...	3	14	10	3	...	...	...	...	2	
,,	1913	...	...	4	12	12	1	1	...	...	63	
,,	1914	...	...	5	12	6	5	2	...	...	50	

As pointed out in previous reports the mortality amongst infants depends upon certain social and personal factors more or less under individual and municipal control.

Poverty, intemperance, uncleanliness, ignorance, unsuitable food, overcrowding, offensive accumulations, imperfect removal of house, stable, and street refuse, all contribute to this end. A reference to the tables and diagrams in this report will show the variations in infant mortality in the several wards in the town during a period of years, and the influence of social and housing conditions is sufficiently obvious.

Much good in the direction of reducing this mortality has been done by the "Infant Consultations" which have been continued regularly during the year under the immediate and efficient supervision and direction of Dr. E. Creaser, Assistant Medical Officer of Health, helped by the Health Visitors in this Department.

The further development of these consultations in accordance with the complete scheme set forth in the memorandum of the Local Government Board, given below, is now under the consideration of the Health Committee.

Attention has frequently been directed to the part played by insanitary conditions in the causation of infantile diarrhœa and other ailments, and particularly to the danger of untidiness and negligence in the disposal of house refuse. This is often placed in any kind of receptacle.

It has been frequently pointed out in annual reports that illness, particularly the summer diarrhœa of infants, may to some extent be attributed to the road dust which prevails in the very hot and dry weather, and that this nuisance could be abated by a much more plentiful supply of water to the roads in the summer months. Suggestions have been made, both by the Waterworks Engineer and myself, that some use could be made of the water from the Ely works for this purpose. This water is not very suitable for drinking purposes, but is occasionally used in times of extremely dry weather and deficient rainfall, when the supply from the Taff Fawr works runs short. This inconvenience will, however, no longer be felt when the new reservoir, now in course of construction, is complete.

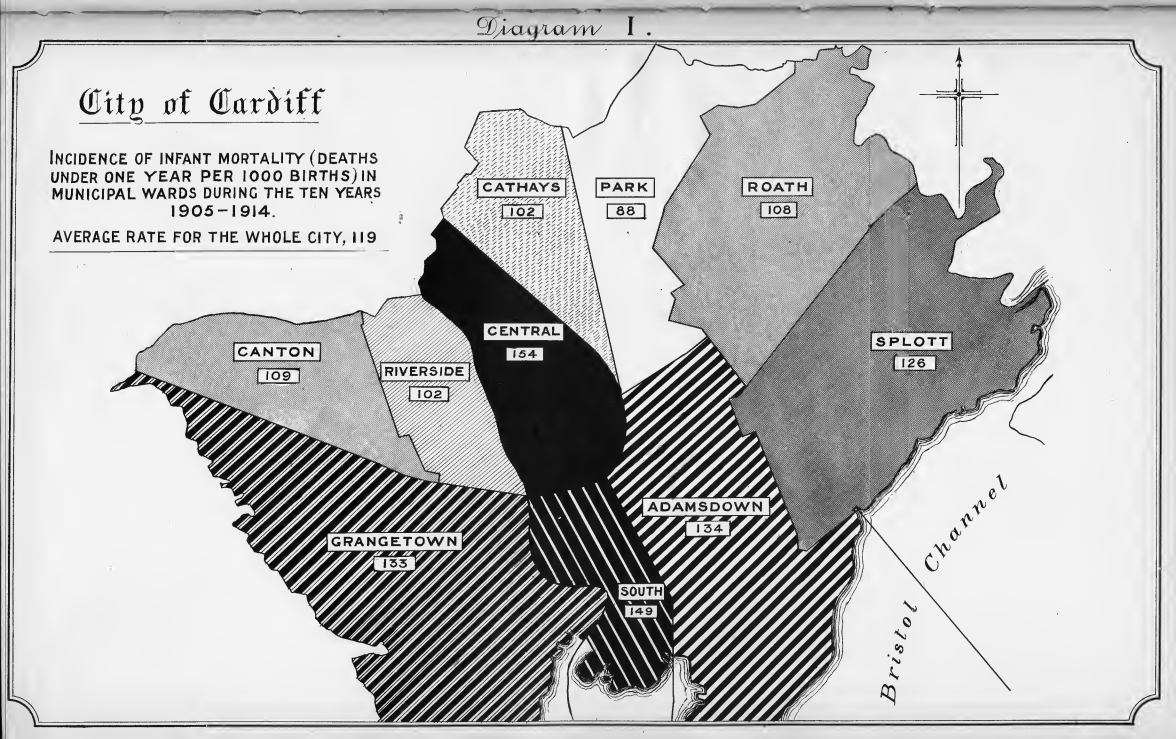
NOTIFICATION OF BIRTHS ACT, 1907.—This Act, which was adopted in 1908, provides for the notification to the Medical Officer of Health of every birth within the City by the father, if residing in the house where the birth takes place, and by any person in attendance upon the mother at the time of, or within six hours after, the birth. The notification must be given to the Medical Officer of Health within thirty-six hours after birth.

The following table gives the number of births notified under this Act in each quarter of the year 1914, together with the number of still-births notified.

TABLE LIV.

1914.	Births notified by Midwives.	Births notified by Doctors or Parents.	Duplicate Notifications Received.	Actual Number of Births notified.	Still-births notified.
1st Quarter ...	1,214	24	8	1,172	57
2nd ,, ...	1,271	52	24	1,250	49
3rd ,, ...	1,187	31	7	1,159	52
4th ,, ...	1,207	30	13	1,175	49
Totals ...	4,879	137	52	4,756	207

Diagram I.


City of Cardiff
INCIDENCE OF INFANT MORTALITY (DEATHS UNDER ONE YEAR PER 1000 BIRTHS) IN MUNICIPAL WARDS DURING THE TEN YEARS 1905–1914.
AVERAGE RATE FOR THE WHOLE CITY, 119
CATHAYS
102
PARK
88
ROATH
108
CENTRAL
154
CANTON
109
RIVERSIDE
102
SPLOTT
126
ADAMSDOWN
134
GRANGETOWN
133
SOUTH
149
Bristol Channel

Births notified during the year 1914	4,756
Births registered during the year 1914	4,783
Number of still-born infants buried in the Cardiff Cemetery during the year 1914	248

It will be seen that 99·4 per cent. of the births registered were notified.

Since the adoption of the Notification of Births Act, it has been possible to undertake certain administrative work with a view of reducing the rate of infant mortality. A systematic attempt is made to impart instruction to mothers in the care and management of infants. This takes the form of weekly "Infant Consultations" and domiciliary visitations. The general supervision is undertaken by the Medical Officer of Health, and the actual work, which is of a most useful kind, was during last year carried out in a most efficient manner under the immediate direction of the Lady Assistant Medical Officer, Dr. Creaser, assisted by Mrs. Huntley, Miss W. Jones and Miss B. King, the Health Visitors of the Sanitary Authority. No voluntary association is connected with this work, which is entirely municipal, and forms part of the health administration under the Health Committee of the Corporation.

"Infant Consultations" were established in Cardiff in the year 1909; six centres were formed in several parts of the town. Subsequently, in 1910, it was found more convenient to concentrate the work in one centre, in suitable rooms in the Department of the Medical Officer of Health in the City Hall, and since July in that year these "Consultations" have been held weekly on Tuesdays in these rooms. The mothers receive instruction in the feeding and management of the infants. These are weighed at each visit, the weight being recorded on charts; the mothers can readily observe the progress and development which is noted each week. The "Consultation" therefore serves as a centre of instruction for mothers and for expectant mothers. It is also utilized as a training centre for Health Visitors, School Nurses, and pupil Midwives, and is co-ordinated for this purpose with the theoretical course of instruction given in the classes of lectures and demonstrations in the University College and Technical School. It forms a useful link connecting the machinery of the Notification and Births Act and the Midwives Act, bringing all the workers in these Departments into intimate touch and association.

It is capable also of further extensions in the direction of some supervision over the period of child life, which intervenes between infancy and admission to the Infants' Department of the Elementary School. It is found in the examination of school children in these Departments, that many of the ailments or physical defects to which the young children are subject, might have been prevented by earlier attention. This applies, of course, to the poorer classes, who cannot readily obtain skilled advice, and who perhaps are less apt to realise the importance of such assistance than those living under more favourable conditions. The actual medical treatment of sick children is not undertaken at the "Consultations"; when this is found necessary, the mother is referred to her own doctor, or to a hospital or dispensary. The treatment is preventive, the object being to instruct the mothers in the care and management of themselves and their infants, so as to avoid the necessity of actual treatment.

The following Report was submitted to the Health Committee during the year and is now under consideration:—

REPORT OF THE MEDICAL OFFICER OF HEALTH ON MATERNITY CENTRES.

In July, 1914, the Local Government Board issued a Circular Letter to Sanitary Authorities relating to "Maternity and Child Welfare," in which it was stated that a grant would be distributed by the Board in aid of the expenditure of local authorities and voluntary agencies in respect of institutions or other provision for Maternity and child welfare, and that the grant would be made in aid of expenditure in respect of clinics, dispensaries, infant consultations and other institutions primarily concerned with the provision of medical and surgical advice and treatment as well as in respect of the salaries of health visitors and other officers engaged in this work. Application has been made by your Authority to the Local Government Board for a grant in aid of the expenditure in connection with the "Infant Consultations" held at the City Hall in the Department of the Medical Officer of Health. Application was also made to the Board of Education for a grant in aid of the expenditure of this Institution so far as regards the educational aspect of the work.

A Memorandum was also issued by the Local Government Board setting forth a complete scheme for dealing with maternity and child welfare, at "Maternity Centres," "Infant Consultations," or similar Institutions. (Memo. enclosed.) The work carried on at the Cardiff Infant Consultation does not of course comprise the complete scheme.

It is restricted and limited by the available resources. Your Committee is well acquainted with the work at the Infant Consultations, which has been in operation since the year 1909, and is now under the immediate supervision of Dr. Creaser, one of the Assistant Medical Officers assisted by the Health Visitors, School Nurses and Superintendent of Midwives. It will be seen that a complete scheme would involve the establishment of several Maternity Centres in different parts of the town, probably three, including that at the City Hall.

An alternative would be the extension of the work at the existing "Consultation" without additional centres. Several centres would be a convenience to mothers living in different parts of the town but would involve increased expenditure in many ways. The scheme would also include a Maternity Hospital in which complicated cases of pregnancy can receive treatment. With this exception the organization set forth in the Memorandum of the Local Government Board, would in Cardiff simply mean an extension of the methods adopted by your Committee in 1909, and still in operation.

With respect to the establishment of a Maternity Hospital it is unlikely that your Committee would undertake to establish and maintain an Institution of this kind. Obviously, it would be more convenient to link up a Maternity Department at King Edward VII.'s Hospital with the organisation of maternity centres or Infant Consultations under the Health Committee.

If some combination of this kind could be effected some portion of the money derived from the Government Grant could be devoted to the Maternity Hospital forming part of the complete scheme. One of the chief wants in this district is a Maternity Hospital for the treatment of complicated cases of pregnancy and of complications arising after parturition amongst women of the working classes or those unable to obtain expert advice and treatment.

EDWARD WALFORD,
Medical Officer of Health.

City Hall, Cardiff,
25th January, 1915.

MEMORANDUM OF THE LOCAL GOVERNMENT BOARD.

MATERNITY AND CHILD WELFARE.

A complete scheme would comprise the following elements, each of which will, in this connection, be organised in its direct bearing on infantile health.

1. Arrangements for the local supervision of Midwives.

2. Arrangements for :—

Ante-Natal.
- (1) An Ante-natal Clinic for expectant mothers.
- (2) The home visiting of expectant mothers.
- (3) A Maternity Hospital or beds at a hospital, in which complicated cases of pregnancy can receive treatment.

3. Arrangements for :—

Natal.
- (1) Such assistance as may be needed to ensure the mother having skilled and prompt attendance during confinement at home.
- (2) The confinement of sick women, including women having contracted pelvis or suffering from any other condition involving danger to the mother or infant at a hospital.

4. Arrangements for—

Post-Natal.
- (1) The treatment in a hospital of complications arising after parturition, whether in the mother or in the infant.
- (2) The provision of systematic advice and treatment for infants at a Baby Clinic or Infant Dispensary.
- (3) The continuance of these Clinics and Dispensaries, so as to be available for children up to the age when they are entered on a school register, *i.e.*, the register of a Public Elementary School, Nursery School, Créche, Day Nursery, School for Mothers or other School.
- (4) The systematic home visitation of infants and of children not on a school register as above defined.

Local Government Board,
Whitehall, S.W., July, 1914.

The individual babies under observation at the " Infant Consultation " and the attendances during the year 1914 were as follows :—

	No. of Babies.	No. of Attendances.
1st Quarter	424 ...	907
2nd ,, ...	474 ...	987
3rd ,, ...	478 ...	1,066
4th ,, ...	343 ...	833

Altogether, 1,719 babies attended the "Consultations" during the year 1914 ; of these, 685 were regular attendants, and 391 casual visitors. Forty-eight " Consultations " were held during the year, with a total number of 3,793 attendances. The average attendance at each " Consultation " was 79.

The deaths among the infants attending the " Consultation " were as follows :—

1914.	Under 12 months.	Over 12 months.	Total.
1st Quarter	7 ...	10 ...	17
2nd ,, ...	4 ...	4 ...	8
3rd ,, ...	8 ...	2 ...	10
4th ,, ...	1 ...	1 ...	2
	20 ...	17 ...	37

The following table gives the number of infants, at ages under one year, who attended the " Consultation " during the year 1914.

Ages	No. of Infants.
1—2 weeks	2
2—3 ,, ...	16
3—4 ,, ...	51
1—3 months	332
3—6 ,, ...	210
6—9 ,, ...	147
9—12 ,, ...	123
Total under 12 months ...	881

The deaths amongst 881 children under one year of age attending the "Consultation " amounted to 20, giving a rate of mortality of 22·7 per 1,000 infants attending under that age. It must be remembered, however, that very few infants are brought to the " Consultations " during the first fortnight of their lives, in which period the mortality is much higher than at later periods.

The ages at death and causes of death amongst the 20 children under one year of age were as follows :—

Ages.	Number.	Cause of Death.
Under 1 week	0 ...	
1—2 weeks ...	0 ...	
2—3 ,, ...	0 ...	
3—4 ,, ...	0 ...	
4 weeks to 3 months	6 ...	1 congenital marasmus, 1 specific convulsions, 3 enteritis, 1 bronchitis.
3—6 months ...	5 ...	1 tuberculosis, 2 bronchitis, 1 whooping cough, 1 convulsions.
6—9	3 ...	1 whooping cough, 1 diphtheria, 1 epidemic diarrhœa.
9—12 ,, ...	6 ...	3 broncho-pneumonia, 2 whooping cough, 1 tubercular meningitis.

The Health Visitors (Mrs. Huntley, Miss Jones, and Miss King) paid a large number of visits to the homes if those mothers who most required and desired instruction from them. Altogether, 7,943 visits were paid, the number of infants visited within two weeks of their birth being 3,954.

Nature of food of 3,954 infants under one year of age visited by the Health Visitors :—

Breast fed	3,424
Breast fed and other food	203
Cow's milk	93
Cow's milk and other food	33
Condensed milk	138
Condensed milk and other food	18
Patent foods	45
Total	3,954

During the summer months, 58 fatal cases of diarrhœa amongst infants under one year of age came under the observation of the Health Visitors. Information relating to the nature of the food given to these infants is furnished in the following table :—

TABLE LV.

Nature of Food.	Under 3 months.	3—6 months	6—12 months	Totals.
Breast fed only	4	1	3	8
Breast fed and other food ...	...	1	1	2
Cow's milk	4	6	3	13
Cow's milk and other food	...	1	1	2
Condensed milk	8	6	4	18
Condensed milk & other foods	2	...	2	4
Patent foods	4	4	3	11
Totals	22	19	17	58

MIDWIVES ACT, 1902.—This Act has now been in operation since the 1st April, 1903, and is administered locally by the Health and Port Sanitary Committee, with the Medical Officer of Health as Executive Officer.

The Act provides for the education of midwives, and for the certification and enrolment of women qualified to act in that capacity. No person can now habitually act as a midwife, otherwise than under the direction of a qualified medical practitioner, unless she is certified under this Act. The Certificate of the Central Midwives Board can only be obtained after the training specified in the Rules of the Board, and after passing the Board's Examination. A certain number of midwives were, however, placed on the Roll of Midwives and certified in virtue of their having been in pratice before the passing of the Act.

The rules regulating the course of training for the certificate of the Board specify that no person shall be admitted to an examination, unless she has undergone a course of theoretical and practical instruction in the subjects embraced by the examination, given by a teacher recognised by the Board, and unless she has attended and watched the progress of not fewer than twenty labours, and has nursed twenty lying-in women and their infants during the ten days following labour. This practical training must be carried out under the supervision of a medical practitioner approved by the Board for the purpose, or of a certified midwife or matron of an approved institution, or of any certified midwife approved by the Board. The Committee of the Queen's Nursing Institute have established a Maternity Department, and take pupils for the practical training of midwives. This training may also be obtained by the resident nurses at the Cardiff Union Infirmary. Three certified midwives in practice in Cardiff have been recognised by the Central Midwives Board for the purpose of giving practical instruction to pupil midwives.

A course of lectures has been established in connection with the Medical School of the University College of South Wales and Monmouthshire in Cardiff, intended to meet the requirements of candidates presenting themselves for the examination of the Central Midwives Board. Dr. E. J. Maclean is the teacher recognised by the Board for this purpose. He informs me that during the year 1914, ninety pupil midwives attended his course of lectures, of whom thirty-four were resident in Cardiff. The Cardiff City Council, through the Technical Instruction Committee, and the Glamorgan County Council, through the Education Committee, contribute towards the expenses of this course, and have the privilege of nominating pupils for free studentships in midwifery. Twelve such studentships are awarded annually to women residing in Cardiff.

Under the Rules of the Central Midwives Board, midwives are required to advise medical treatment whenever there is any illness of the mother or child during pregnancy, labour, or lying-in, or in the case of any abnormality during this period. She must hand to the husband, or the nearest relative or friend present, the form of sending for medical help—Rule 22 (*a*)—send a copy of this form without delay to the Local Supervising Authority, and keep one herself. Amongst the complications in the case of the child which necessitate this procedure, is "inflammation of or discharge from the eyes, however slight."

The following tables give information relating to the administration of the Midwives Act during the year 1914.

Number of Midwives on Roll for 1914	123

QUALIFICATIONS OF CERTIFIED MIDWIVES.

Bona Fide	63
Certificate of London Obstetrical Society	8
Certificate of Central Midwives Board	52
Total	123

Particulars as to appliances, etc., possessed by Midwives :—

Washable dresses	83
Bags for appliances	81
Appliances—complete	72
Appliances—part	11
Case Books	80
Record books	70

Records of sending for medical help received from Midwives :—

In the case of the mother	105
In the case of the child	37
Total	142

Records of Sending for Medical Help by Midwives.

In Case of the Mother :—	
Abortion	1
Delay in labour	32
Malpresentation	13
Ante-Partum Hæmorrhage	7
Post-Partum Hæmorrhage	2
Retained Placenta	8
Ruptured Perineum	13
Pyrexia	5
Small Pelvis	13
Placenta Prævia	1
Illness of Mother	10
	105
In Case of the Child :—	
Feebleness and Illness of Infant	16
Deformity	2
Still-births	1
Discharging Eyes	14
Convulsions	3
Death	1
	37
Still-births notified by Midwives	207
Still-births attended by Midwives without Medical Practitioner ...	56
Cases of Puerperal Fever attended by Midwives	9

During the year one certified midwife was reported to the Central Midwives Board for failing to send for medical help in a case of puerperal fever.

One unqualified midwife was dealt with by the Committee.

PUBLIC HEALTH (OPHTHALMIA NEONATORUM) REGULATIONS, 1914.

By this Order of the Local Government Board, Ophthalmia Neonatorum became compulsorily notifiable by Medical Practitioners and Certified Midwives on the 1st April, 1914.

The following letters were sent to the Medical Practitioners and Certified Midwives practising in the District :—

March, 1914.

Dear Sir,

OPHTHALMIA NEONATORUM.

I am directed to inform you that the Local Government Board have issued an Order, dated 5th February, 1914, by which, on and after the 1st April, 1914, the disease of Ophthalmia Neonaturum will become compulsorily notifiable by Medical Practitioners and Certified Midwives.

In issuing the Order the Board state that they are advised that general notification of this disease is desirable ; that a large proportion of the blindness contracted in childhood is due to the neglect of proper precautions against the disease, and, in their view, it is important that Medical Officers of Health should have early information of all cases.

Your attention is directed to Article V. of the Public Health (Ophthalmia Neonatorum) Regulations, 1914, which is as follows :—

> Subject to the provisions of these Regulations every Medical Practitioner, on first becoming aware that a child upon whom he is in professional attendance is suffering from Ophthalmia Neonatorum, shall forthwith make and sign a notification of the case in the Form prescribed for the purpose of certificates under Section 3 of the Infectious Disease (Notification) Act, 1889, at the same time stating in writing, either on

the form or on a separate sheet attached to the form, the date of birth of the child, the name and address of parent or other person, if any, having charge of the child, and the date of the onset of the disease, and shall transmit the notification and statement aforesaid to the Medical Officer of Health for the district within which the place of residence of the parent or other person, if any, having charge of the child is situate at the date of notification.

Provided that a Medical Practitioner shall not be required to notify a case of Ophthalmia Neonatorum under these Regulations if the case has been notified by a Certified Midwife.

Article VII. provides that a notification to be transmitted to a Medical Officer of Health in pursuance of the Regulations, shall be enclosed in a sealed envelope addressed to that Officer, and may be delivered at his Office, or may be sent by prepaid letter post.

The Local Authority will pay to every Medical Practitioner a fee of two shillings and sixpence for each notification duly made, signed, and transmitted by him under the Regulations if the case occurs in his private practice, and of one shilling if the case occurs in his practice as Medical Officer of any public body or institution. The fee shall in each case be deemed to cover all expenses, including the cost of transmission.

I send herewith a new book of notification forms, which please to use for the notification of infectious diseases (other than Tuberculosis) including Ophthalmia Neonatorum. Cases of Tuberculosis will, of course, as heretofore be notified on the blue notification forms.

I am,

Yours faithfully,

EDWARD WALFORD,

Medical Officer of Health.

March, 1914.

DEAR MADAM

OPHTHALMIA NEONATORUM.

I am directed to inform you that the Local Government Board have issued an Order, dated 5th February, 1914, by which, on and after 1st April, 1914, the disease of Ophthalmia Neonatorum will become compulsorily notifiable by Certified Midwives.

In issuing the Order the Board state that they are advised that general notification of this disease is desirable; that a large proportion of the blindness contracted in childhood is due to the neglect of proper precautions against the disease, and, in their view, it is important that Medical Officers of Health should have early information of all cases.

Your attention is directed to Article VI. of the Public Health (Ophthalmia Neonatorum) Regulations, 1914, which is as follows:—

Subject to the provisions of these Regulations, every Certified Midwife who has reasonable ground for supposing that a child upon whom she is in attendance, or whom she is called in to visit in the course of her practice is suffering from Ophthalmia Neonatorum, shall, unless the case has been already notified by a Medical Practitioner, forthwith make and sign a notification of the case in the Form set out in the Schedule to these Regulations, and shall transmit the notification to the Medical Officer of Health for the District within which the place of residence of the parent or other person, if any, having charge of the child, is situate at the date of notification.

Article VII. provides that a notification to be transmitted to a Medical Officer of Health in pursuance of the Regulations, shall be enclosed in a sealed envelope addressed to that Officer, and may be delivered at his Office, or may be sent by prepaid letter post.

The Local Authority will pay to every Certified Midwife a fee of one shilling for each notification duly made, signed and transmitted by her under these Regulations. The fee in each case shall be deemed to cover all expenses, including the cost of transmission.

I herewith send you a book of forms for use in connection with the notification of cases of Ophthalmia Neonatorum.

I am,

Yours faithfully,

EDWARD WALFORD,

Medical Officer of Health.

During the year 1914, 36 notifications were received. Six of these were duplicate notifications, making a total of 30 cases notified, as follows:—

Cases notified by	Medical Practitioners	13
,, ,,	Medical Practitioners and Midwives ...	6
,, ,,	Midwives	11
	Total number of Cases	30

A Medical Practitioner was in attendance at the birth in ...	8	cases
A Certified Midwife was in attendance in	21	,,
An unqualified Midwife was in attendance in	1	,,
	30	

This unqualified Midwife was reported to the Committee.

Three Midwives were reprimanded by the Medical Officer of Health for failing to notify cases.

The ages of the infants at the onset of the disease ranged from one to forty days ; the vast majority occurring between the ages of one to seven days.

Results in the 30 cases notified were :—

Complete recovery	22
Mistaken diagnosis (Midwives')	3
Left the district	3
Died (broncho-pneumonia)	1
Opacities in both eyes, sight considerably impaired ...	1
Total	30

Three of these infants have since died.

When the notification of a case is received, the infant is visited immediately by a Health Visitor, and if a doctor is not already in attendance she urges the parents to obtain medical advice without delay—the case is then visited from time to time to see that the medical instructions are carried out.

An arrangement has been made with the Queen Victoria Jubilee Nurses' Institute for their nurses to assist in the carrying out of the treatment prescribed by the Medical Practitioners

MILK SUPPLY.—Closely associated with the question of infant mortality is that of the control of the milk supply to the public. Besides the powers conferred by the Public Health Act, 1875, the Public Health Acts Amendment Act, 1907, and the Infectious Disease (Prevention) Act, 1890, the Cardiff Sanitary Authority possesses special powers under the Cardiff Corporation Act, 1909.

The Milk and Cream Regulations came into operation on the 1st October, 1912, and as regards Article V. (1) on January 1st, 1913. This Article relates to the description by the seller of preserved cream, upon advertisements, price lists, etc., showing that the article sold is cream to which preservatives have been added.

In a circular issued by the Local Government Board in August, 1912, it is explained that :—

"The Regulations are designed to secure that no preservative shall be added to milk, or to cream containing less than 35 per cent. by weight of milk fat, at any stage from the place of production to that of delivery to the purchaser. In the case of cream containing over 35 per cent. of milk fat, the addition of boric acid, borax of a mixture of these preservative substances, or of hydrogen peroxide, is not prohibited by the Regulations, but is subject to a system of declaration which is required to be followed by all persons dealing with such cream for the purpose of sale for human consumption. By this system (Part II. of the Regulations) it is intended that preserved cream as an article of commerce shall in all stages be differentiated from cream to which no preservative has been added. Further, Article IV. (*a*) prohibits the addition of any thickening substance to cream or preserved cream.

"It will be seen that except as regards Part III. the duty of administering the Regulations has been placed upon those authorities in England and Wales who are local authorities under the Sale of Food and Drugs Acts.

"Existing arrangements for the collection and examination of milk samples under the Sale of Food and Drugs Acts can readily be extended so as to enable the Council to receive such reports from the

public analyst as are requisite. Arrangements will he required for the periodical examination of samples of cream for the purpose of ascertaining whether the requirements of the Order are being duly complied with.

"In the case of any contravention of the Regulations steps should be taken to ascertain the circumstances in which the default has arisen with a view to any necessary action. Article VI. requires that before the local authority institute proceedings against any person for contravention of any of the Regulations in Part II. of the Order, the local authority shall afford him an opportunity of furnishing an explanation and shall consider such explanation and all the circumstances of the case. It should he observed that the proceedings here in question are those authorised hy the Public Health (Regulations as to Food) Act, 1907, and the enactments referred to in the Notice at the foot of the Order.

"It will be desirable that the Medical Officer of Health should he instructed to exercise general supervision over the action taken in pursuance of these Regulations, and that the officer of the Council who directs sampling under the Sale of Food and Drugs Acts should be instructed to confer with the Medical Officer of Health and with the Public Analyst as to the details of procedure necessary to secure the observance of the Regulations in the area over which the Council has supervision."

The following tables relate to the proceedings taken under the Regulations :—

TABLE LVI.

1. Milk ; and Cream not Sold as Preserved Cream.

	Number of samples examined for the presence of a preservative.	Number in which a preservative was reported to be present.
Milk	520*	...
Cream	18	7

* Samples taken under the Sale of Food and Drugs Acts, and included in Table LXVI.

TABLE LVII.

Nature of preservative in each of the foregoing seven cases, and action taken under the Regulations in regard to same :—

No. of Sample.	Description.	Preservative present.	Action taken.
220	Cream ...	0·75% of boric acid ...	Explanation received from seller, who was cautioned by Local Authority.
223	,, ...	0·76% ,, ,, ...	Ditto ditto
506	,, ...	0·18% ,, ,, ...	Informal sample.
511	,, ...	0·12 % ,, ,, ...	Ditto
512	,, ...	0·40% ,, ,, ...	Ditto
827	Raw Cream ...	0·34% ,, ,, ...	Ditto
828	Cream ...	0·37% ,, ,, ...	Ditto

2. Cream Sold as Preserved Cream.

(*a*) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct :—

(i)	Correct statements made	30	(Including	20	informal samples.)	
(ii)	Statements incorrect	—		—		
	Total	30	(,,	20	,,	,,)
		—		—		

(*b*) Determinations made of milk-fat in cream sold as preserved cream :—

(i)	Above 35 per cent.	30
(ii)	Below 35 per cent.	...
	Total ...	30

(*c*) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V. (1) and the proviso in Article V. (2) of the Regulations have not been observed :—

2 (see below ; samples 526 and 527).

TABLE LVIII.

(*d*) Particulars of each case in which the Regulations have not been complied with, and action taken :—

No. of Sample.	Infringement.	Action taken.
526	Cream deposited for sale in a vessel that was not labelled	Cautioned by Local Authority.
527	Cream deposited for sale in a vessel that was not labelled	Cautioned by Local Authority.

Forty samples of mixed milk were taken in Cardiff, including the milk from 1,390 cows supplying milk to the City. No evidence of the presence of tubercle bacilli was found. Of these samples, two came from cows in cowsheds in Cardiff, twenty-five were taken at railway stations from milk cans consigned to Cardiff dealers, twelve from milk carts in the City and one from an Institution. The two samples contained the mixed milk from 25 cows. Altogether the mixed milk from 1,390 cows supplying the City of Cardiff were examined, including that from 25 cows in the Cardiff cowsheds, and that from 1,365 cows in farms and cowsheds outside the City.

FOOD INSPECTION.—The inspection of meat at the Public Abattoirs has been carried out satisfactorily during the year, under the arrangements set forth in the Annual Report for 1909. Mr. J. P. Mullane, M.R.C.V.S., is the Chief Meat Inspector, with two Inspectors under his direction, each holding the Certificate for Inspectors of Meat and other Foods of the Royal Sanitary Institute. Since all the slaughtering of animals is carried on at the two municipal slaughter-houses, there is no difficulty in securing an efficient inspection of meat before it is sold for human consumption.

The Inspectors have directions to pay regard to the recommendations of the Select Committee of the House of Commons on the Tuberculosis (Animals) Compensation Bill, 1904, to the effect that, "If a butcher who is in possession of tuberculous meat has notified the fact to the proper authority as soon as he could be reasonably expected to be aware of it, the case should not be taken

into Court." The principles laid down by the Royal Commission on Tuberculosis in their report of 1898, with respect to the degree of tubercular disease which should cause a carcase or part thereof to be seized, are observed, although generally no difficulty is experienced in obtaining the owner's consent to the destruction of meat found to be unfit for food, either by reason of tuberculosis or other conditions.

Mr. G. M. McGregor, Certified Inspector of Meat and Other Foods, who was formerly a butcher, acts in the capacity of Inspector of Meat and other Foods in shops, markets and wholesale stores within the City, and assists in the inspection of meat at the slaughter-houses.

In connection with meat inspection, the facilities provided at the Public Health Laboratory are utilized for the purpose of diagnosis.

In the following tabular statements particulars are given with reference to diseased or unsound food dealt with during the past year.

TABLE LIX.

Animals slaughtered at the Municipal Slaughter-houses during the year 1914 :—

	Roath Abattoir.	Canton Abattoir.	Totals.
Cattle	8,013	794	8,807
Sheep and Lambs	33,061	4,024	37,085
Calves	5,486	149	5,635
Pigs	19,075	2,607	21,682
Totals	65,635	7,574	73,209

TABLE LX.

Unsound carcases of meat surrendered at Abattoirs and destroyed by arrangement with the owners :—

Place.	Carcases of				Totals.
	Beef.	Mutton and Lamb.	Veal.	Pork.	
Roath Abattoir	51	43	20	39	153
Canton Abattoir	1	7	1	7	16
Totals ...	52	50	21	46	169

TABLE LXI.

Causes of destruction of carcases :—

Cause.	Beef.	Mutton and Lamb.	Veal.	Pork.	Totals.
Anæmia	...	1	...	...	1
Asphyxiation	...	6	1	1	8
Congestion	...	...	1	...	1
Decomposition	...	1	...	...	1
Dropsy	...	8	1	...	9
Emaciation	1	5	...	...	6
Emaciation and Dropsy	...	9	...	...	9
Exhaustion	...	1	1	2	4
Echinococcus Veterinorum	...	1	...	...	1
Found Dead	...	12	5	1	18
Jaundice	...	1	1	...	2
Nephritis	...	1	...	...	1
Peritonitis	...	...	...	4	4
Pleurisy	...	2	...	...	2
Pyæmia	...	1	...	...	1
Prematurity	...	...	6	...	6
Rheumatism	..	..	...	2	2
Traumatism	..	1	...	2	3
Tuberculosis	51	...	5	34	90
Totals	52	50	21	46	169

TABLE LXII.

Approximate weight of diseased or unsound meat surrendered at Abattoirs and destroyed by arrangement with the owners :—

	Whole Carcases.			Part Carcases.			Offals.			Totals.		
	tons	cwt.	lbs.	tons	cwt.	lbs.	tons	cwt.	lbs.	tons	cwt.	lbs.
Beef	13	3	96	2	13	74	11	18	42½	27	15	100½
Veal		10	66			6		4	11		14	83
Mutton and Lamb		16	51			44	1	3	0	1	19	95
Pork	1	16	72		14	81½	1	5	56	3	16	97½
Totals ...	16	7	61	3	8	93½	14	10	109½	34	7	40

TABLE LXIII.

Approximate weight of diseased or unsound food surrendered at shops and stores, and destroyed or otherwise dealt with by arrangement with the owners :—

	tons	cwt.	lbs.
Beef, etc.	13	4	0
Veal, etc.	0	13	91
Mutton and Lamb, etc.	8	8	85
Pork, etc	3	15	84
Poultry		4	5½
Rabbits		9	102
Fish	7	17	106
Provisions	6	7	14
Vegetables	4	0	43
Fruit	6	18	42
Total	52	0	12½

TABLE LXIV.

Approximate weight of diseased or unsound food destroyed or otherwise dealt with, either by consent of the owners, or by Magistrates' Orders, in each year since 1896 :—

Year.	Food.			Year.	Food.		
	tons.	cwt.	lbs.		tons.	cwt.	lbs.
1896	1	14	88	1906	21	16	77
1897	4	16	72	1907	24	3	84
1898	4	8	73	1908	65	4	54
1899	6	6	93	1909	73	6	12
1900	9	9	49	1910	76	12	8
1901	15	0	96	1911	90	17	80
1902	19	9	107	1912	105	18	70
1903	18	12	46	1913	77	11	39
1904	18	11	54	1914	86	7	52½
1905	18	7	108				

TABLE LXV.

Number of animals slaughtered and the number and proportion per cent. condemned at the Municipal Slaughter-houses during each of the years 1902 to 1914 :—

Year.	Number of Animals Slaughtered.	Number of Animals Condemned	Per cent. Condemned.
1902	85,046	75	0·09
1903	81,258	77	0·09
1904	85,704	88	0·10
1905	80,558	84	0·10
1906	77,583	108	0·14
1907	79,733	90	0·11
1908	81,496	110	0·13
1909	87,438	117	0·13
1910	81,539	124	0·15
1911	81,898	149	0·18
1912	79,263	174	0·22
1913	74,845	167	0·22
1914	73,209	169	0·23

SALE OF FOOD AND DRUGS ACTS.—Samples submitted for analysis during the year 1914, to the Public Analyst, Mr. Thomas Hughes, F.I.C. :—

TABLE LXVI.

Description.	Number Analysed.	Genuine.	Adulterated.
Arrowroot	7	7	...
Baking Powder	3	3	..
Beer	6	6	...
Brawn	1	1	...
Bread	7	7	...
Butter	112	109	3
Bloater-paste	2	2	...
Cheese	24	24	...
Cream	50	44	6
Coffee	12	12	...
Cornflour	4	4	...
Corned Beef	2	2	...
Flour	3	3	...
Flour (self-raising)	3	3	...
Ginger	6	6	...
Golden Syrup	6	6	...
Lard	6	6	...
Margarine	23	23	...
Milk	520	484	36
Milk (skimmed)	5	5	...
Oatmeal	3	3	...
Pepper	18	18	...
Sausage	19	15	4
Sardines	7	7	...
Salmon and Shrimp Paste ...	1	1	...
Totals	850	801	49

TABLE LXVII.

Legal Proceedings under the Sale of Food and Drugs Acts :—

No. of Sample.	Description.	Adulteration.	Fines.	Remarks.
1	Milk	27% added water ...	£5 and costs (16/6) ...	
30	,, ...	5·3% deficient fat ...		Dismissed—warranty
44	,, ...	17·5% added water	£5 and costs (7/–) ...	
47	,, ...	11·8% ,, ,, ...		Dismissed—warranty
50	,, ...	8·7% ,, ,, ...		Withdrawn
61	,, ...	3·2% ,, ,, ...	To pay costs (8/–) ...	
62	Sausage ...	0·36% boric acid ...	£5 and costs (7/–) ...	
82	Milk	10·3% deficient fat ...	£10 and costs (14/–)	
84	,, ...	2% ,, ,, ...	10/– and costs (14/–)	
96	Sausage ...	0·35% boric acid ...		Dismissed—warranty
133	Milk	10·7% deficient fat ...	To pay costs (10/–) ...	
145	,, ...	4·3% ,, ,, ...	£1 and costs (£1 10s.)	
171	,, ...	9·2% added water ...	£1 and costs (6/–) ...	
280	,, ...	9% deficient fat ...	To pay costs (12/6) ...	
300	,, ...	9·7% ,, ,, ...	£5 and costs (10/–) ...	
303	,, ...	13·3% ,, ,, ...	£5 and costs (7/–) ...	
319	,, ...	5·3% ,, ,, ...		Dismissed
320	,, ...	11·3% ,, ,, ...		Dismissed
329	,, ...	2·8% added water ...		Dismissed
344	,, ...	7·3% deficient fat ...	£5 and costs (7/–) ...	
358	,, ...	4·3% ,, ,, ...	£2 and costs (15/6) ...	
381	,, ...	22·3% ,, ,, ...	£5 and costs (8/–) ...	
387	,, ...	11·3% ,, ,, ...	£5 and costs (7/–) ...	
486	Milk	8% deficient fat ...		Dismissed
600	,, ...	6·3% ,, ,, ...	10/– and costs (6/6)	
614	,, ...	5% ,, ,, ...		Dismissed
651	,, ...	4·7% ,, ,, ...	£1 and costs (6/–) ...	
694	,, ...	10·6% added water	£5 and costs (6/–) ...	
719	,, ...	9% ,, ,, ...	£5 and costs (7/–) ...	

TABLE LXVIII.

In the following cases legal proceedings were not taken :—

No. of Sample.	Description.	Adulteration.	Remarks.
97	Sausage ...	0·095 boric acid	Proceedings not recommended.
130	Milk ...	1·9% added water ...	,, ,, ,,
180	,, ...	1·7% deficient fat	
189	Sausage ...	0·11% boric acid	
220	Cream ...	0·75% boric acid	
223	,, ...	0·76% ,, ,, ...	
281	Milk ...	2% added water	Proceedings not recommended.
440	Butter ...	0·9% excess of water ...	Informal
473	,, ...	0·48% ,, ,, ...	,,
474	,, ...	0·35% ,, ,, ...	Not recommended.

TABLE LXVIII.—con.

No. of Sample.	Description.	Adulteration.	Remarks.
526	Cream ...	Vessel not labelled ...	
527	,, ...	,, ,, ...	
572	Milk ...	2% added water	Proceedings not recommended
619	,, ...	2% deficient fat	,, ,, ,,
675	,, ...	3% added water	,, ,, ,,
724	,, ...	1% ,, ,, ...	,, ,, ,,
727	,, ...	1·3% ,, ,, ...	,, ,, ,,
827	Raw cream ...	0·34% boric acid	Informal sample
828	,, ,, ...	0·37% ,, ,, ...	,, ,,
843	Milk ...	1·5% added water ...	Proceedings not recommended

Legal proceedings are not taken in cases of milk in which the percentage of adulteration is very small.

TABLE LXIX.

Other legal proceedings under the Sale of Food and Drugs Acts :—

Offence.	Fines.	Remarks.
False warranty *re* milk (Sample No. 30) ...	...	Dismissed
False warranty *re* milk (Sample No. 47) ...	...	Dismissed
Selling milk from vehicle without having conspicuously inscribed on such vehicle his name and address	£1 and costs (6/–)	
Selling milk from a pail without having conspicuously inscribed on same his name and address	...	Withdrawn

TABLE LXX.

Samples of milk analysed and proportion adulterated :—

	Samples Analysed	Samples Adulterated.					
		Number.	Percentage.	Added Water	Deficient Fat.	Added Water and Deficient Fat.	Preservatives
Wholesale—							
Taken at Railway Stations	221	12	5·4	5	7	...	...
Retail—							
Taken in shops, from carts, etc.	304	24	7·8	9	15	...	...
Totals	525	36	6·8	14	22	...	...

FACTORY AND WORKSHOP ACT, 1901.—Under Section 132 of the Factory and Workshop Act, 1901, the Medical Officer of Health is required in his annual report to deal specifically with the administration of the Act (so far as the matters under the charge of the Sanitary Authority are concerned), and to send a copy of this report to the Secretary of State.

"Factories" include all places in which mechanical power is used in aid of the manufacturing processes, and certain other industries specified in Part I. of Schedule VI. to the Act, whether mechanical power is used or not. The duty devolving upon the Health Department in connection with factories is confined to the enforcement of Section 22 of the Public Health Acts Amendment Act, 1890, relating to the provision of suitable and sufficient sanitary conveniences. The inspections of factories referred to in the tables were in connection with this duty. The Workshop Inspectors made 952 inspections of factories during the year, and 73 notices were served.

"Workshops" include premises (not being factories) in which manual labour is exercised by way of trade or for purposes of gain in, or incidental to, the making, altering, repairing, finishing, or adapting for sale any article, and to or over which the employer of the persons working there has the right of access or control. The inspections of such premises during the year amounted to 3,084. The number of notices served in cases where sanitary defects were found was 303.

"Workplaces," although not defined in the Act, include any place where work is done permanently, and where people assemble together to do work permanently of some kind or another, such as stables, kitchens of restaurants, etc. The number of inspections of such places made during the year amounted to 571, and 41 notices were served.

Underground bakehouses are dealt with by special provisions of the Factory and Workshop Act, 1901. It is provided in Section 101 of the Act, that no underground bakehouse shall be used as such unless it was so used at the time of the passing of the Act, and that after the 1st January, 1904, no underground bakehouse (whenever established) may be used unless the Sanitary Authority is satisfied that it is suitable for the purpose in all respects, and has granted a certificate of suitability. A bakehouse is deemed to be an underground bakehouse if any room used for baking, or for any purpose incidental thereto, is so situate that the surface of the floor is more than three feet below the surface of the footway of the adjoining street or of the ground adjoining or nearest to the room. There are four underground bakehouses in Cardiff for which certificates have been granted, three only being in use at the end of last year.

One hundred and fifteen lists of outworkers were received, giving the names and addresses of 213 work-people engaged in home work, and 372 inspections were made of outworkers' premises.

In 27 instances sanitary defects were discovered, and notices were served in these cases. Great importance is attached to the inspection of places in which these outworkers are engaged, the object being to prevent unwholesome conditions or nuisances injurious to the health of the workers. Sections 107–115 of the Act of 1901 give power to the Local Authority to prohibit work being done by outworkers (1) in dwellings which are injurious or dangerous to the health of the workers themselves, *e.g.*, through overcrowding, want of ventilation, or other insanitary conditions, and (2) in premises where there is dangerous infectious disease. Nuisances found upon these premises were abated in the ordinary way under the provisions of the Public Health Acts and Sanitary Byelaws. In two instances infectious disease was found upon the premises of an outworker, and orders were made prohibiting the occupiers of the workshops from giving out work to the persons living upon the infected premises until certified to be free from infection.

The Inspectors of Workshops made altogether 4,979 visits of inspection to factories, workshops, etc., during the year. 444 notices regarding nuisances or sanitary defects were served, and 468 notices were complied with. Details of the work carried out under the Act are set forth in Tables LXXI. to LXXIII. in this Report.

The following statement is prepared by request of the Secretary of State.

TABLE LXXI.

1.—Inspection of Factories, Workshops and Workplaces.

Premises.	Number of		
	Inspections	Written Notices.	Prosecutions.
Factories (including Factory Laundries)	952	73	—
Workshops (including Workshop Laundries)	3,084	303	—
Workplaces (other than Outworkers' premises included in Part 3 of this Report)	571	41	—
Total	4,607	417	—

2.—Defects Found in Factories, Workshops and Workplaces.

Particulars.	Number of Defects	
	Found.	Remedied
Nuisances under the Public Health Acts :—		
Want of cleanliness	122	121
Want of ventilation	11	14
Overcrowding	2	1
Other nuisances	311	268
Sanitary accommodation ... insufficient	11	8
Sanitary accommodation ... unsuitable or defective ...	55	47
Sanitary accommodation ... not separate for sexes ...	24	12
Breach of special sanitary requirements for bakehouses (Sec. 97 to 100)	33	34
Total	569	505

In the foregoing table, where the number of defects remedied exceed those found, the defects were found in 1913, and remedied in 1914.

TABLE LXXI.—con.

3.—Home Work.

Nature of Work.	Outworkers' Lists, Section 107.							Outwork in Unwholesome Premises, Section 108.		Outwork in Infected Premises, Sections 109, 110	
	Lists received from Employers										
	Sending twice in the year.			Sending once in the year.							
	Lists.	Outworkers		Lists.	Outworkers.		Notices served on Occupiers as to keeping or sending lists.	Instances.	Notices served.	Instances.	Orders made (S. 110).
		Contractors	Workmen.		Contractors	Workmen.					
Wearing Apparel—											
(1) making, etc. ...	104	...	498	11	...	44	127	27	27	2	2
(2) cleaning & washing	...	...	...	...	...	...	...	...	...	...	...

4.—Registered Workshops.

Workshops on the Register (S. 131) at the end of the Year.	Number.
Bakers	155
Bootmakers	188
Dressmakers and Milliners	242
Laundries	48
Tailors	104
Miscellaneous	570
Total number of Workshops on Register ...	1,307

5.—Other Matters.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (Sec. 133) ...	12
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts but not under the Factory Act :—	
Notified by H.M. Inspector	25
Reports (of action taken) sent to H.M. Inspector	24
Other (Notices of Occupation of Workshops received from H.M. Inspector) ...	82
Underground Bakehouses in use at the end of the year	3

TABLE LXXII.

Factories and workshops on the registers at the end of the year 1914, the number of inspections made, and the number of notices served during the year :—

	Number on Registers.	Number of Inspections.	Number of Notices Served.
WORKSHOPS :—			
Bakers	155	816	63
Bootmakers	127	310	29
Dressmakers and Milliners	196	213	16
Laundries	43	275	33
Tailors	91	186	38
Miscellaneous	525	1,076	108
DOMESTIC WORKSHOPS :—			
Bootmakers	61	71	6
Dressmakers and Milliners	46	51	1
Laundries	5	8	1
Tailors	13	12	1
Miscellaneous	45	66	7
WORKPLACES :—			
Miscellaneous	318	571	41
OUTWORKERS' PREMISES :—			
Tailors	202	364	27
Miscellaneous	11	8	...
FACTORIES :—			
Bakers	28	113	3
Bootmakers	21	18	...
Laundries	22	27	4
Miscellaneous	437	794	66
Totals	2,346	4,979	444

TABLE LXXIII.

Nuisances in Factories, Workshops, &c. during the Year 1914.

Nuisances.	Bakehouses.		Bootmakers' Premises.		Dressmakers' and Milliners' Premises.		Laundries.		Tailors' Premises.		Outworkers' Premises.		Miscellaneous.		Totals.	
	Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied
Want of cleanliness	33	34	7	6	2	3	18	17	26	23	14	12	69	72	169	167
Want of ventilation	2	...	2	5	2	1	2	2	...	1	...	1	5	5	13	15
Overcrowding	...	...	...	...	...	...	...	...	1	1	...	...	1	...	2	1
Want of drainage of floors	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sanitary Insufficient	1	1	...	...	...	...	...	...	...	...	...	1	10	6	11	8
Accommodation — Unsuitable or defective ...	...	...	3	3	2	2	4	3	5	5	3	2	41	34	58	49
Accommodation — Not separate for sexes ...	...	...	...	...	...	...	...	...	2	1	1	1	22	11	25	13
Defective or choked drains	10	9	11	13	1	...	4	4	5	3	2	3	28	24	61	56
Defective syphon traps	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
Defective gully traps	...	...	...	...	...	...	...	...	...	...	...	...	2	3	2	3
Want of flushing apparatus	1	1	1	1	1	1	1	...	...	...	...	...	2	2	6	5
Defective flushing apparatus	1	3	4	4	...	...	3	4	...	2	3	1	18	16	29	30
Defective yard surfaces	3	3	3	4	2	2	2	2	...	...	...	1	1	2	11	14
Offensive accumulations	3	3	2	3	1	1	1	2	3	2	6	12	17	16	33	39
Want of manure receptacles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Defective manure receptacles ...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1
Other nuisances	32	25	16	20	6	7	16	15	12	11	14	15	94	62	190	155
Totals	86	79	49	59	17	17	51	49	54	49	43	49	312	254	612	556

SHOPS ACTS, 1912 and 1913.—The Shops Act, 1912, which came into operation on 1st May, 1912, repealed the Shops Regulation Acts, 1892–1911. It re-produces without change of substance the provisions of previous Acts dealing with shops, from the Shop Hours Act, 1892, down to and including the Shops Act, 1911. Amongst other provisions, the Act provides that every shop-assistant must be allowed a half-holiday, and must be given intervals for meals and rest. The hours of employment of young persons under 18 years of age are regulated under the Act. Provision is also made requiring employers to provide seats for female shop-assistants. Shop-keepers are required to close their shops at 1 p.m. on one week-day in every week, unless it is exempted on one of the grounds mentioned in the Act. The local authority have power to make an Order for any class of shop with the consent of the occupiers of two-thirds of the shops of the class, fixing the hour on each day of the week (other than the half-holiday) at which the shops are to close; the hour fixed must not be earlier than 7 p.m. Such Closing Orders cannot, however, apply to certain classes of business which are exempt. The Shops Act, 1913, alters the provisions of the Act of 1912 with reference to the meal times and half-holidays of assistants employed in the sale of refreshments, without reducing the time to be set apart for such meal times and half-holidays.

TABLE LXXIV.

Closing Orders fixing the closing time of shops in operation in Cardiff, and number of inspections and infringements thereunder during the year 1914 :—

No. of Order	Trade	Area	Inspections	Infringements
1	Barbers	Whole City	428	7
2	Bootmakers	Grangetown	25	...
3	Bootsellers	Central Area	50	2
4	,, ...	Roath, Cathays & Park ...	97	2
5	,, ...	Riverside and Canton ...	68	3
6	Goldsmiths, etc.	Central Area	65	2
7	Pawnbrokers	,, ,, ...	7	...
8	Goldsmiths, Pawnbrokers, etc. ...	Whole of City, except Central	110	6
9	General and Fancy Drapers, Milliners, etc.	East of Taff Vale and Rhymney Railways ..	113	2
10	Toys or Fancy Goods	Central Area	81	5
11	Pharmacists, Chemists and Druggists	Whole of City, except South	115	...
12	Ironmongers, Iron and Steel Sellers, etc.	Park Wark	28	2
13	Hay, Corn, Seed Merchants, etc. ...	Whole City	246	10
		Totals ...	1,433	41

Other inspections and infringements under the Shops Act, 1912, during the year 1914 :—

Number of shops visited	5,968
Number of observations of shops	3,757
Infringements with reference to :—	
Assistants' meal times	1
Assistants' half-holiday	133
Employment of young persons	81
Seats for female shop-assistants	2
Closing of shops for weekly half-holiday	310

Most of the above infringements were in connection with notices which shop-keepers are required to affix in the interior and on the exterior of their shops.

Altogether legal proceedings were taken in 14 cases. The number of defendants fined was 2; 9 were cautioned, 2 had to pay costs only, and 1 case was withdrawn. The fines amounted to 6/– and 13/6 costs.

SANITARY INSPECTION OF DISTRICT.—The general sanitary inspection of the district, inspection of factories, and workshops, inspection of shops under the Shops Acts, inspection of seamen's and common lodging houses, the inspection of meat and other food in shops and stores, and the taking of samples for analysis under the Sale of Food and Drugs Acts, were carried out during the year 1914 by Mr. S. Evans, Chief Inspector of Nuisances, with the assistance of fourteen Assistant Inspectors.

For the purposes of inspection, the City is divided into six districts, as follows :—

District No. 1—Canton and Riverside Wards.
,, No. 2—Splott Ward and part of Adamsdown Ward.
,, No. 3—Park Ward and part of Cathays Ward.
,, No. 4—Central Ward and parts of Cathays and South Wards.
,, No. 5—Grangetown Ward and part of South Ward.
,, No. 6—Roath Ward and part of Adamsdown Ward.

The following statement, in addition to other tables in this report, shows the nature and extent of the work performed by the Chief Inspector and his Assistants.

SUMMARY OF SANITARY INSPECTION OF DWELLING HOUSES, &c., DURING THE YEAR 1914 :—

Complaints of nuisances received	697
Houses, etc., inspected	6,707
House-to-house inspections (including testing of drains)	2,159*
Re-inspections of houses, etc.	17,046
Drains tested with smoke	437
,, ,, chemicals	944
Notices served :—	
Informal	2,688*
Statutory	25*
Notices complied with :—	
Informal	2,646*
Statutory	30*
Towns Improvement Clauses Act, 1847 :—	
Notices *re* defective shutes served	508
,, ,, ,, complied with	533

* Including inspections and notices referred to in Table I., pages 11 and 12.

In connection with the sanitary inspection of dwelling houses, 4,470 sanitary defects were remedied, details of which are given below :—

Drains unchoked and repaired	879
Soil pipes, ventilation shafts and fresh air inlets repaired	30
New W.C. pans provided	80
New syphon traps provided	10
New gully traps provided	23
W.C.s repaired	88
W.C.s cleansed	93
Flushing apparatus provided	1
,, ,, repaired	35
Trough outlets repaired	104
Roofs repaired	662
Shutes repaired	547
Down-pipes repaired	82
Chimneys repaired	66
Inside plastering repaired	131
Outside ,, ,,	114

Areas repaired	22
Yard surfaces repaired	319
Yards, &c., cleansed	50
Outhouses cleansed or repaired	16
Accumulations removed	140
Manure receptacles provided	3
,, ,, repaired	5
Boundary and party walls repaired	37
Doors repaired	42
Floors repaired	196
Windows repaired	244
Ceilings repaired	70
Houses, bedding, &c., cleansed	74
Ventilation improved	2
Water supply provided	24
Overcrowding abated	64
Other nuisances abated	217

Particulars as to the inspection of premises periodically inspected during the year 1914 are herewith given :—

OFFENSIVE TRADES :—

Number on Register	41
Inspections	345
Notices served	7
Notices complied with	8

DAIRIES, COWSHEDS AND MILKSHOPS :—

Milkshops on Register	370
Cowsheds on Register	9
Inspection of milkshops	2,505
,, cowsheds	123
Notices served	44
Notices complied with	47

SHOPS, STORES, &c. :—

Inspections of butchers' shops	1,428
,, ,, provision shops	329
,, ,, markets	699
,, ,, wholesale stores	1,626
,, ,, fish and fruit shops	330
,, ,, storage premises	1,433
,, ,, army stores	60
Other inspections	257

MISCELLANEOUS INSPECTIONS :—

Public houses	545
Notices served	29
Notices complied with	48
Theatres, &c.	114
Notices served	6
Notices complied with	6
Fried-fish shops	657
Notices served	23
Notices complied with	19
Ice-cream shops	1,369
Notices served	27
Notices complied with	26
Inspections of urinals	274
Smoke observations	16
Visits to owners *re* notices	872

COMMON LODGING HOUSES :—

Common Lodging Houses on Register	30
Day Inspections	1,497
Night Inspections	—
Notices served	76
Notices complied with	75

SEAMEN'S LODGING HOUSES :—

Seamen's Lodging Houses on Register	158
Licences granted	193
Licences relinquished	35
Day inspections	4,638
Night Inspections	—
Notices served under Byelaws	396
Notices under Byelaws complied with	381
Notices served under Public Health Acts	70
Notices under Public Health Acts complied with	56
Persons cautioned for lodging seamen without being licensed	10
Legal proceedings for lodging seamen without being licensed	—

TABLE LXXV.

SUMMARY OF LEGAL PROCEEDINGS.

Proceedings taken under	Number	Fined	Cautioned	To pay Costs only	Dismissed	Withdrawn	Amount of Fines
Sale of Food and Drugs Acts ...	37	20	2	3	10	2	£78 and costs
Shop Hours Acts	15	2	10	2	...	1	6/– and costs
Public Health Acts (Amendment) Act, 1907, Sec. 37	1	...	...	...	...	1	...
Towns Improvement Clauses Act, 1847 (Sec. 74)	1	1	...	...	...	...	10/– and costs
Midwives Act, 1902	1	...	...	1	...	...	Bound over in the sum of £50 to be of good behaviour for 12 months
Totals	55	23	12	6	10	4	£78 16s. 0d. & costs

DISINFECTING STATION, CLEANSING STATION, and MORTUARY.—The new Disinfecting and Cleansing Station was completed and opened in June, 1912. The Station is situated on land adjacent to the Mortuary.

The accommodation of the Cleansing Department comprises separate baths and rooms for males and females. Each side contains a bath-room, waiting-room and dressing-room, with all the necessary appliances.

The Cleansing of Persons Act, 1897, permits Sanitary Authorities to provide Cleansing Stations and apparatus for cleansing verminous persons and their garments free of charge, upon the application of such persons. The Children Act provides that where the Sanitary Authority has made this provision, the Education Authority may avail themselves of it for enforcing the requirement as to the compulsory cleansing of verminous school children.

The cleansing of school children, when necessary, is done by School Nurses. During the year 1914, the number of children cleansed at the Cleansing Station amounted to 52 ; of these, 25 were verminous and 27 suffered from scabies. In all cases the children's bedding and clothes were disinfected, and the rooms occupied by them were also cleansed and disinfected by the Disinfectors.

Infected premises are disinfected either by fumigation with sulphur dioxide, formaldehyde, or by means of a spray of formalin. Articles of clothing and bedding are removed from the house in which the infectious disease occurred to the Disinfecting Station, and submitted to disinfection by saturated steam in a Washington Lyon's high pressure steam disinfecting apparatus.

During the year the routine disinfection comprised the following :—

Houses disinfected	1,942
School class-rooms disinfected	48
Articles of bedding, clothing, etc., disinfected	13,669
,, ,, ,, ,, destroyed	202
,, soldiers' clothing, etc., disinfected	7,545

The number of bodies removed to the Mortuary during the year was 82 (68 males and 14 females). The number of post-mortem examinations performed was 33.

CARDIFF METEOROLOGICAL STATION.—The Cardiff Meteorological Station is situated on land belonging to the Corporation (Waterworks Department) at Penylan.

The geographical position of the Station is Latitude 51° 30′ N., Longitude 3° 10′ W., and the height of the Station above mean sea level is 203 feet.

The Meteorological Station is under the control of the Medical Officer of Health Observations are made at 9 a.m., and 9 p.m.—at 9 a.m. by Mr. F. Glover, of the Medical Officer of Health's Department, and at 9 p.m. by Mr. W. J. Mellings, caretaker of the Penylan Waterworks and Public Telescope.

The Station is recognised by the Meterological Office, London, as a Station of the Second Order, and is periodically inspected by an Inspector from that Office, who has on each occasion reported favourably upon the arrangements, and upon the way in which the observations are taken and the records kept.

The instruments in use have been verified at the Kew Observatory, and the necessary instrumental corrections are duly made.

Weekly and monthly reports on the weather are sent to the Meteorological Office, London, which are included in the Weekly and Monthly Weather Reports issued by that Office.

The averages with which the monthly rainfall and mean temperature are compared are those for the twenty-five years 1889–1913, and the sums following the signs + and — in the following tables show respectively the difference from the average, either above or below.

TABLE LXXVI.

BAROMETRIC PRESSURE AND RELATIVE HUMIDITY.

1914.	Mean Barometric Pressure*		Hygrometer*		
	Uncorrected	At M.S.L. and 32° F.	Dry-bulb) (mean)	Wet-bulb (mean)	Mean Relative Humidity
	in.	in.	°F.	°F.	%
January	29·966	30·192	38·8	37·6	89
February	29·497	29·705	43·8	42·2	87
March	29·427	29·635	43·3	42·3	87
April	29·899	30·089	49·9	46·1	74
May	29·941	30·121	52·1	48·3	75
June	29·911	30·075	58·1	54·3	77
July	29·744	29·897	64·5	56·5	81
August	29·886	30·038	60·6	57·8	83
September...	29·928	30·090	55·9	53·0	80
October	29·851	30·030	56·6	48·8	84
November	29·718	29·914	44·2	42·6	87
December	29·470	29·677	40·8	34·3	92
Means	29·769	29·122	50·7	46·9	83

*From observations at 9 a.m. and 9 p.m.

TABLE LXXVII.

TEMPERATURE.

1914	Maximum	Minimum	Mean of Maximum	Mean of Minimum	Mean Temperature	Difference from Average (25 years)
	°F.	°F.	°F.	°F.	°F.	°F.
January...	53	25	43·4	34·8	39·1	+0·4
February	55	32	50·0	39·5	44·7	+4·7
March	62	29	49·9	38·0	44·0	+1·6
April	71	35	58·7	42·2	50·4	+4·2
May	72	35	59·6	44·8	52·2	—0·2
June	81	40	66·6	50·5	58·5	+1·2
July	82	45	67·3	53·8	60·5	—0·2
August	79	47	68·5	54·3	61·4	+1·3
September	77	38	64·9	49·1	57·0	+0·7
October	68	37	57·0	46·1	51·5	+1·4
November	58	29	50·0	41·7	45·3	+1·5
December	54	25	46·7	36·0	41·3	+1·0
	Max.	Min.	Mean	Mean	Mean	
	82	25	56·8	44·2	50·5	+1·47

TABLE LXXVIII.

SOLAR AND TERRESTRIAL RADIATION, UNDERGROUND TEMPERATURE, AND SUNSHINE.

1914	Temperature.				Bright Sunshine	Bright Sunshine; difference from Average (6 years)
	Solar Maximum (Mean)	Grass Minimum (Mean)	Underground (Mean)			
			1 ft.	4 ft.		
	°F.	°F.	°F.	°F.	hrs.	
January	57·9	31·4	38·6	43·8	38·1	—19·2
February	77·7	35·5	43·1	44·4	66·4	—16·3
March	92·0	35·2	43·5	45·1	107·3	— 4·6
April	109·0	36·1	50·0	47·7	256·8	+92·6
May	110·0	40·2	54·6	51·9	193·7	—31·4
June	119·8	46·1	60·4	55·6	274·7	+65·3
July	121·3	51·2	63·0	59·3	180·6	—31·7
August	117·4	52·0	62·6	59·6	214·9	+26·2
September	111·3	47·1	59·5	59·7	205·4	+61·2
October	91·0	43·0	52·7	55·5	86·9	—13·3
November	73·3	36·8	45·4	50·8	56·4	—19·3
December	65·9	32·3	41·1	46·3	63·8	+14·5
	Mean	Mean	Mean	Mean	Total	
	95·5	40·5	51·2	51·6	1745·0	+123·6

TABLE LXXIX.

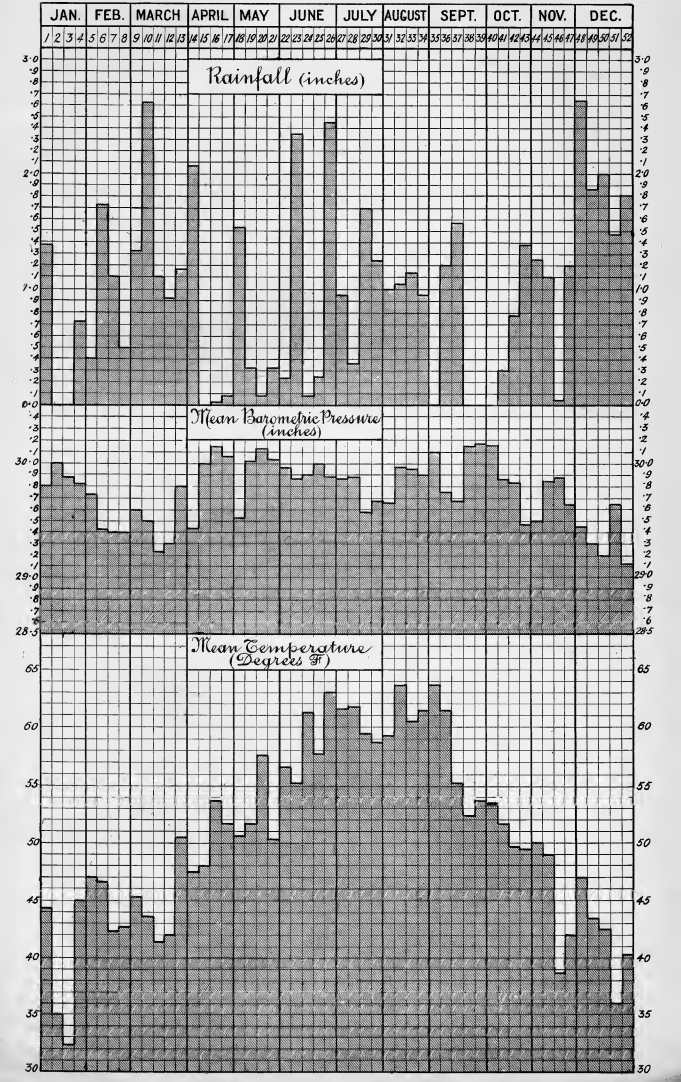
RAINFALL.

1914	Amount	Difference from Average (25 years)	* Greatest Fall in 24 hours	* Date of Greatest Fall	* No. of days with Rain (0·01 in. or more)
	ins.	ins.	ins.		
January	2·13	—1·48	·67	8th	12
February	3·74	+1·03	·81	13th	18
March	6·38	+3·32	·80	11th	27
April	2·88	+0·14	·61	5th	11
May	2·33	+0·04	·72	3rd	16
June	2·93	+0·10	1·19	9th	10
July	6·21	+3·77	1·38	2nd	18
August	3·53	—0·66	·78	25th	14
September...	2·68	+0·02	·84	13th	10
October	2·45	—2·38	·66	25th	13
November	5·21	+1·63	·77	30th	21
December	8·16	+3·54	·95	17th	24
	Total				Total
	48·63	+9·05	1·38	2nd July	194

*24 hours ending 9 a.m. next day.

Diagram J

SHOWING RAINFALL, MEAN BAROMETRIC PRESSURE, AND MEAN TEMPERATURE RECORDED AT THE METEOROLOGICAL STATION, PENYLAN, CARDIFF, IN EACH WEEK DURING THE YEAR 1914.



CARDIFF AND COUNTY PUBLIC HEALTH LABORATORY.—The Laboratory forms part of the buildings of the University College, Cardiff, and is used for teaching purposes in connection with the Public Health Department of the College. It is maintained jointly by the Cardiff Corporation and the Glamorgan County Council, and the Medical Officers of these authorities act as Directors of the Laboratory, having the use of it for bacteriological and chemical investigations connected with their administrative work. The Laboratory is under the immediate supervision of Mr. J. H. Sugden, M.Sc., F.I.C., The Chemist and Water Bacteriologist, and Mr. Walter Fearis, Bacteriologist.

The following statement shows the work carried out for Cardiff during the year 1914 :—

Bacteriological Examinations :—		
Suspected Diphtheria	559	
Suspected Typhoid Fever	39	
Sputa for Tubercle Bacilli	480	
Milks ,, ,, ,, ...	40	
Urines	1	
Rodents for Plague	28	
Gonococcus	4	
Diseased Meat	12	
Other Examinations	2	
		1,165
Chemical Examinations :—		
Milks and Milk Products		37
Drinking Waters :—		
Chemical Analyses	33	
River Water	1	
Bacteriological Examinations	107	
		141
Total ...		1,343

The specimens for suspected diphtheria, typhoid fever, and tuberculosis submitted for examination from Cardiff, together with the results of such examinations, are shown below :—

Nature of Examination.	Positive Results.	Negative Results.	Total.	Percentage of Positive Results.
Suspected Diphtheria ...	198	361	559	35·4
,, Typhoid Fever ...	16	23	39	41·0
,, Tuberculosis ...	142	338	480	29·6

Mixed milks from Cardiff examined for Tubercle Bacilli :—

Number examined	40
Positive	Nil.
Negative	40
Percentage of positive results	Nil.

Although the samples were all from milk supplies serving the city, the original sources of the milk were in most cases outside Cardiff.

Bacteriological examinations were made of 69 samples of drinking water from ships, submitted by the Cardiff Port Sanitary Authority, with the following results :—

Cantaminated	...	...	...	...	...	16
Doubtful Purity	...	...	...	...	...	17
Satisfactory ...	...	...	...	...	...	36

Samples of water from the various Cardiff reservoirs and filter beds were examined at frequent intervals, both bacteriologically and chemically, with the object of controlling the purity of the water supply at its sources during transit, and in the service, in addition to testing the efficiency of the various filter beds. Samples of sand, deposit, and other material associated with the public water supply have also been examined. The action of the filtered water upon various metals has been tested and reported upon.

I have the honour to be,

My Lord Mayor and Gentlemen,

Your obedient Servant,

EDWARD WALFORD,

Medical Officer of Health.

APPENDIX.

CITY OF CARDIFF.

LOCAL GOVERNMENT BOARD TABLES. TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1914 AND PREVIOUS YEARS.

Year	Population estimated to Middle of each Year.	Births.			Total Deaths Registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Uncorrected Number.	Nett.				of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.	
			Number.	Rate.	Number.	Rate.			Number.	Rate per 1,000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1909	178,987	5,026	5,026	28·0	2,619	14·6	156	86	518	103	2,549	14·2
1910	180,849	4,822	4,822	26·6	2,454	13·5	165	67	537	111	2,356	13·0
1911	182,729	4,744	4,730	25·8	2,671	14·6	189	112	639	135	2,594	14·1
1912	184,633	4,612	4,597	24·9	2,620	14·2	166	109	509	110	2,563	13·9
1913	186,554	4,912	4,900	26·2	2,618	14·0	181	130	566	115	2,567	13·7
1914	188,495	4,790	4,783	25·3	2,699	14·3	198	143	523	109	2,644	14·0

This Table is arranged to show the gross births and deaths in the district, and the births and deaths properly belonging to it with the corresponding rates. The rates are calculated per 1,000 of the estimated population.

In Column 6 are included the whole of the deaths registered during the year as having actually occurred within the district.

In Column 12 is entered the number in Column 6, corrected by subtraction of the number in Column 8, and by addition of the number in Column 9. Deaths in Column 10 are similarly corrected by subtraction of the deaths under 1, included in the number given in Column 8, and by addition of the deaths under 1 included in the number given in Column 9.

"Transferable Deaths" are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided.

Total population at all ages	182,259	At Census 1911
Total families or separate occupiers	31,127	
Average number of persons per house	5·8	
Area of District in acres (land and inland water) ...	6,373	

TABLE II.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1914.

NOTIFIABLE DISEASE.	Number of Cases Notified.								Total Cases Notified in each Locality.			Total Cases Removed to Hospital.
	At all Ages.	At Ages—Years.							East Cardiff Regis. Sub-Dist.	Central Cardiff Regis. Sub-Dist.	West Cardiff Regis. Sub-Dist.	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.				
Small-pox	3	...	...	...	...	2	1	...	...	3	...	3
Cholera, Plague...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	620	4	109	388	68	41	9	1	145	171	304	383
Erysipelas	125	3	4	7	13	36	54	8	33	47	45	...
Scarlet Fever	1,086	11	257	702	78	36	2	...	301	323	462	770
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	29	...	...	7	10	9	3	...	7	7	15	21
Relapsing Fever, Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	11	...	...	...	3	8	...	...	7	3	1	...
Cerebro-spinal Meningitis	1	...	...	1	...	...	...	...	...	1	...	...
Poliomyelitis	3	...	1	2	...	...	...	...	2	...	1	...
Ophthalmia Neonatorum	33	33	...	...	...	...	...	...	6	20	7	...
Pulmonary Tuberculosis	353	3	10	19	88	178	50	5	91	142	120	117
Other forms of Tuberculosis	81	6	14	27	25	8	1	...	26	32	23	14
Totals	2,345	60	395	1,153	285	318	120	14	618	749	978	1,308

TABLE III.

CAUSES OF AND AGES AT DEATH DURING THE YEAR 1914.

Causes of Death.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.									Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District.
	ALL AGES.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
1	2	3	4	5	6	7	8	9	10	11
All causes { Certified	2,644	523	147	123	113	132	388	605	613	589
All causes { Uncertified	...	...	...	...	...	...	...	...	...	...
Enteric Fever	12	...	...	...	1	2	6	3	...	7
Small-pox	...	...	...	...	...	...	...	...	...	...
Measles	61	8	29	20	4	...	...	...	...	2
Scarlet Fever	19	2	4	11	1	...	1	...	...	16
Whooping Cough ...	73	39	17	15	2	...	...	...	...	3
Diphtheria and Croup ...	42	3	3	17	18	...	...	1	...	26
Influenza	17	2	...	...	1	1	3	7	3	...
Erysipelas	...	...	...	...	...	...	...	...	...	...
Phthisis (Pulmonary Tuberculosis) ...	230	1	4	3	18	49	102	49	4	65
Tuberculous Meningitis ...	31	11	7	6	5	1	...	1	...	3
Other Tuberculous Diseases	32	6	3	3	6	4	8	2	...	8
Cancer, malignant disease	169	...	...	...	3	1	28	87	50	51
Rheumatic Fever ...	11	1	...	...	1	3	1	4	1	...
Meningitis	16	4	3	3	2	3	1	...	...	2
Organic Heart Disease ...	219	1	1	...	5	6	28	90	88	37
Bronchitis	199	31	8	5	7	1	13	39	95	52
Pneumonia (all forms) ...	210	46	42	20	5	10	32	36	19	31
Other diseases of Respiratory organs ...	51	5	3	6	...	...	10	18	9	10
Diarrhœa and Enteritis ...	107	91	5	1	1	...	2	6	1	5
Appendicitis and Typhlitis	6	...	...	1	2	1	2	...	...	9
Cirrhosis of Liver ...	14	...	...	...	...	...	2	8	4	4
Alcoholism	4	...	...	...	...	...	2	1	1	...
Nephritis and Bright's Disease	72	...	...	...	2	3	10	34	23	9
Puerperal Fever ...	3	...	...	...	...	...	3	...	...	1
Other accidents and diseases of Pregnancy and Parturition ...	19	...	...	...	...	5	14	...	...	2
Congenital Debility and Malformation, including Premature Birth ...	183	180	3	...	...	...	...	...	...	8
Violent Deaths, excluding Suicide	132	4	3	8	11	20	37	31	18	78
Suicide	15	...	...	...	...	2	5	8	...	1
Other Defined Diseases ...	683	87	12	4	18	19	76	173	294	155
Diseases ill-defined or unknown	14	1	...	...	...	1	2	7	3	4
Totals	2,644	523	147	123	113	132	388	605	613	589
Sub-entries (included in above figures)—										
Cerebro-spinal Meningitis	2	1	...	1	...	...	...	...	...	...
Poliomyelitis	1	...	...	...	1	...	...	...	...	...
Pneumonia	108	8	12	6	1	8	27	32	14	22

TABLE IV.

INFANT MORTALITY DURING THE YEAR 1914.

NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE.

Cause of Death	Under 1 week	1-2 weeks.	2-3 weeks	3-4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months	9 months and under 12 months.	Total Deaths under 1 year
All causes { Certified ...	123	30	20	12	185	97	106	79	56	523
All causes { Uncertified ...	...	...	...	...	...	...	...	...	...	...
Small-pox ...	...	...	...	...	...	...	...	...	...	...
Chicken-pox ...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	4	4	8
Scarlet Fever ...	...	...	...	...	...	...	...	2	...	2
Whooping Cough ...	...	...	...	1	1	5	10	11	12	39
Diphtheria and Croup ...	...	...	...	...	...	...	...	1	2	3
Erysipelas ...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis ...	...	...	...	...	...	3	3	2	3	11
Abdominal Tuberculosis ...	...		...	...	...	...	2	1	...	3
Other Tuberculous Diseases	...	...	...	...	...	1	...	1	2	4
Meningitis (not Tuberculous)	...	...	...	...	...	...	2	2	...	4
Convulsions	4	1	1	4	10	7	7	7	2	33
Laryngitis	...	...	...	...	...	...	...	...	1	1
Bronchitis	...	1	3	...	4	10	9	5	3	31
Pneumonia (all forms) ...	...	...	1	...	1	6	7	16	16	46
Diarrhœa	1	...	1	...	2	10	13	3	4	32
Enteritis	...	2	...	3	5	15	21	13	2	56
Gastritis	...	...	...	...	...	1	1	1	...	3
Syphilis	2	1	1	1	5	4	3	...	...	12
Rickets	...	...	...	...	...	...	...	1	1	2
Suffocation, overlying ...	3	...	...	...	3	1	1	...	...	5
Injury at birth	2	...	...	...	2	...	...	...	...	2
Atelectasis	10	...	...	1	11	...	...	1	...	12
Congenital Malformations ...	8	3	1	...	12	4	2	...	...	18
Premature Birth	73	12	4	1	90	7	2	...	...	99
Atrophy, Debility and Marasmus	16	9	7	1	33	14	13	2	1	63
Other Causes	4	1	1	...	6	9	10	6	3	34
Totals	123	30	20	12	185	97	106	79	56	523

Nett Births in the year { legitimate 4,590. illegitimate, 193.

Nett Deaths in the year of { legitimate infants 481. illegitimate infants 42.

DEATHS FROM SPECIFIED CAUSES AT ALL AGES, AND AT EIGHT GROUPS OF AGES, IN CARDIFF, DURING THE YEAR 1914.

Causes of Death.	0 to 1		1 to 2		2 to 5		5 to 15		15 to 25		25 to 45		45 to 65		65 & upwards		All Ages.			Rate per 1,000 persons living.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total		
I.—General Diseases.																					
Enteric Fever	...	...	...	...	...	...	1	...	2	...	4	2	2	1	...	...	9	3	12	0·06	
Measles	3	5	13	16	8	12	1	3	...	...	...	...	...	...	...	...	25	36	61	0·32	
Scarlet Fever	1	1	3	1	2	9	1	...	...	...	...	...	...	...	...	...	7	12	19	0·10	
Whooping Cough	21	18	2	15	6	9	...	2	...	...	...	...	...	...	...	...	29	44	73	0·38	
Diphtheria and Membranous Croup	...	1	2	2	1	10	7	12	6	...	...	2	1	...	...	...	26	16	42	0·22	
Influenza	...	1	1	...	...	...	1	...	1	...	2	1	6	1	2	1	13	4	17	0·09	
Dysentery	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	2	1	3	4	0·02	
Pyæmia Septicæmia	...	...	...	...	...	...	1	...	...	...	1	1	1	...	...	...	3	1	4	0·02	
Tetanus	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	0·00	
Pulmonary Tuberculosis (not acute)	...	...	2	2	...	2	6	11	20	27	53	45	37	15	2	2	120	104	224	1·18	
Acute Phthisis	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	0·00	
Acute Miliary Tuberculosis	...	...	1	...	1	...	1	1	...	1	...	...	...	...	...	...	2	3	5	0·02	
Tuberculous Meningitis	7	4	3	4	4	2	3	2	...	1	...	...	...	...	...	...	18	13	31	0·16	
Tuberculosis of Peritoneum and Intestines	1	3	...	1	1	...	2	1	...	2	1	1	...	...	...	...	5	8	13	0·06	
Tuberculosis of Spinal Column	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	0·00	
Tuberculosis of Joints	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	1	3	0·01	
Tuberculosis of Other Organs—																					
General Tuberculosis	...	1	1	...	2	1	1	1	1	...	2	...	...	2	...	...	6	7	13	0·06	
Nasal Bones	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	0·00	
Rickets, Softening of Bones	1	1	4	...	...	...	1	...	...	...	...	...	...	...	...	...	6	1	7	0·03	
Syphilis	8	4	1	1	...	...	...	...	...	...	1	...	...	...	...	...	10	5	15	0·07	
Cancer	...	...	...	...	...	...	1	2	1	...	8	20	40	47	24	26	74	95	169	0·89	
Other Tumours	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	0·00	
Rheumatic Fever	...	1	...	...	...	...	1	...	3	1	...	...	4	...	1	1	10	11	21	0·05	
Chronic Rheumatism, Osteo-arthritis	...	...	...	...	...	...	...	...	1	...	1	...	2	...	4	4	6	6	12	0·06	
Diabetes	...	...	...	...	...	...	...	...	...	1	...	3	4	2	3	1	12	4	16	0·08	
Addison's Disease	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	2	2	0·01	
Leucocythæmia, Lymphadenoma	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	2	1	3	0·01	
Anæmia, Chlorosis	...	...	...	...	...	...	...	...	...	...	...	3	2	2	...	...	4	3	9	0·04	
Alcoholism (acute or chronic)	...	...	...	...	...	...	...	...	...	...	1	...	1	2	...	...	2	2	4	0·02	
Exophthalmic Goitre	...	...	...	...	...	...	...	...	...	...	...	2	1	...	...	...	1	2	3	0·01	
II.—Diseases of the Nervous System and of the Organs of Special Sense :—																					
Encephalitis	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	2	...	2	0·01	
Cerebro-spinal Fever	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	2	2	0·01	
Meningitis, other forms or undefined	1	2	1	2	1	1	1	2	1	1	...	...	...	...	...	...	7	7	14	0·07	
Locomotor Ataxy	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	3	...	3	0·01	
Other Diseases of the Spinal Column	...	...	...	...	...	...	2	1	...	...	1	4	1	2	...	...	3	7	14	0·07	
Cerebral Hæmorrhage, Apoplexy	...	...	...	...	...	...	...	...	...	1	2	5	22	26	23	23	47	55	102	0·54	
Softening of Brain	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	1	2	1	3	0·01	
Paralysis without specified cause :—																					
Hemiplegia	...	...	...	...	1	...	...	...	...	...	...	...	4	8	3	5	7	14	21	0·11	
Paraplegia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	1	2	3	0·01	
Other forms of Paralysis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	2	0·01	
General Paralysis of the Insane	...	...	...	...	...	...	...	...	1	...	6	2	11	1	...	...	18	3	21	0·11	
Epilepsy	...	...	...	...	...	...	...	1	...	...	...	2	1	1	...	...	1	4	5	0·02	
Convulsions (Non-Puerperal : 5 years and over)	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	0·00	
Infantile Convulsions (under 5 years)	21	13	1	1	...	...	...	...	...	...	...	...	...	...	...	...	22	14	36	0·19	
Chorea	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	0·00	
Hysteria, Neuralgia, Sciatica, Neuritis	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	1	3	4	0·02	
Other Diseases of the Nervous System	...	...	...	...	1	...	1	...	...	...	1	1	...	...	...	...	3	1	4	0·02	
Mastoid Disease	...	1	...	...	...	...	...	...	...	...	2	...	...	...	...	...	2	1	3	0·01	
III.—Diseases of the Circulatory System.																					
Pericarditis	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	2	...	2	0·01	
Endocarditis, Myocarditis	...	...	...	...	...	...	2	...	1	...	5	4	1	3	...	...	9	7	16	0·08	
Valvular Disease	...	...	...	...	1	...	...	2	1	5	4	9	25	19	25	11	55	47	102	0·54	
Fatty Degeneration of the Heart	...	...	...	...	...	...	1	...	...	...	2	...	4	1	1	1	8	2	10	0·05	
Other Organic Disease of the Heart	...	1	...	...	...	...	1	...	...	...	8	4	25	18	25	25	60	47	107	0·56	
Angina Pectoris	...	...	...	...	...	...	...	...	...	...	...	...	2	2	1	...	3	2	5	0·02	
Aneurysm	...	...	...	...	...	...	...	...	...	...	1	3	4	1	1	...	6	4	10	0·05	
Arterial Sclerosis	...	...	...	...	...	...	...	...	...	...	2	...	4	3	5	1	11	4	15	0·07	
Cerebral Embolism and Thrombosis	...	...	...	...	...	...	...	...	...	...	...	1	2	1	...	...	2	2	4	0·02	
Other Embolism and Thrombosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	2	0·01	
Hæmorrhage ; other Diseases of the Circulatory System	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	0·00	
Disease of the Nasal Forsae	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	0·00	
IV.—Diseases of the Respiratory System.																					
Diseases of the Larynx :—																					
Laryngismus Stridulus	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	0·00	
Laryngitis	1	...	1	2	3	2	...	...	...	...	...	...	...	...	...	...	4	5	9	0·04	
Bronchitis	19	11	4	4	3	1	4	3	1	...	5	7	22	18	43	54	101	98	199	1·05	
Broncho Pneumonia	22	17	17	14	6	9	2	1	2	...	4	1	3	1	2	3	58	46	104	0·55	
Lobar Pneumonia	1	...	1	1	1	...	...	2	2	1	10	6	14	5	4	3	29	8	37	0·19	
Pneumonia (type not stated)	1	4	5	4	4	1	1	4	...	...	10	6	14	5	4	5	43	26	69	0·36	
Pleurisy, Empyema	...	...	...	...	...	...	...	...	...	...	3	...	3	1	3	...	9	1	10	0·05	
Pulmonary Congestion, Pulmonary Apoplexy	1	2	...	...	...	...	...	...	...	...	1	3	1	3	1	...	4	8	12	0·06	
Asthma	...	...	...	...	...	...	...	...	...	...	2	...	4	1	2	1	8	2	10	0·05	
Pulmonary Emphysema	...	...	...	...	...	...	...	...	...	...	1	...	2	2	...	...	3	2	5	0·02	
Fibroid Disease of Lung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	0·00	
Other Diseases of the Respiratory System	1	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	3	...	3	0·01	
V.—Diseases of the Digestive System.																					
Diseases of the Mouth and Annexa, Thrush	...	2	...	...	...	...	...	...	...	...	2	...	1	...	...	...	3	2	5	0·02	
Diseases of the Pharynx, Tonsilitis	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	2	0·01	
Diseases of Œsophagus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	0·00	
Perforating Ulcer of Stomach	...	...	...	...	...	...	1	1	2	...	...	2	3	1	6	1	6	5	11	0·05	
Inflammation of Stomach	3	1	2	...	...	...	1	...	...	...	1	1	...	3	1	3	8	8	16	0·08	
Other Diseases of the Stomach	...	1	...	...	...	1	...	2	...	...	...	1	...	1	...	...	3	2	5	0·02	
Diarrhœa and Enteritis	44	47	2	3	1	...	...	...	...	...	1	2	...	2	3	1	51	56	107	0·56	
Appendicitis	...	...	1	...	...	1	...	2	1	1	2	...	2	...	1	...	2	4	6	0·03	
Hernia	...	...	...	...	...	...	...	...	...	...	2	...	...	1	1	...	3	1	4	0·02	
Intestinal Obstruction	...	1	...	...	...	...	...	...	...	...	1	...	1	1	...	1	3	2	5	0·02	
Other Diseases of the Intestines	2	1	...	...	...	...	1	...	...	...	1	2	1	...	...	...	6	2	8	0·04	
Cirrhosis of Liver	...	...	...	...	...	...	...	...	...	...	1	1	5	4	2	1	8	6	14	0·07	
Other Diseases of the Liver	...	...	...	...	...	...	...	...	...	1	4	1	4	4	1	2	10	7	17	0·09	
Peritonitis (cause unstated)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	4	0·02	
Other Diseases of the Digestive System	...	...	...	...	...	...	...	2	...	3	...	6	1	...	...	...	11	1	12	0·06	
Biliary Calculi	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	...	4	4	0·02	
VI.—Non-Venereal Diseases of the Genito-Urinary System and Annexa.																					
Acute Nephritis	...	...	...	...	...	...	...	...	1	2	2	3	3	1	...	...	6	6	12	0·06	
Bright's Disease	...	...	...	...	...	2	...	1	5	1	14	14	15	7	3	1	37	23	60	0·31	
Other Diseases of the Kidney and Annexa	...	...	...	...	...	...	...	1	1	...	1	1	3	1	...	...	3	4	7	0·03	
Diseases of the Bladder	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	0·00	
Diseases of the Urethra, Urinary Abscess, etc.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·00	
Diseases of the Prostate	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	4	...	4	0·02	
Ovarian Cyst, Tumour (Non-Cancerous)	...	...	...	...	...	...	...	...	...	...	...	...	1	...	8	...	9	...	9	0·04	
Other Diseases of the Female Genital Organs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	0·00	
Non-puerperal Disease of Breast	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	2	2	0·01	
	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	0·00	
VII.—The Puerperal State.																					
Accidents of Pregnancy, Abortion, etc.	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	3	3	6	0·01	
Puerperal Hæmorrhage	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	3	3	6	0·01	
Other Accidents of Childbirth	...	...	...	...	...	...	...	...	3	...	6	...	...	...	...	...	9	9	18	0·09	
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	3	3	6	0·03	
Puerperal Albuminuria and Convulsions	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	0·00	
Phlegmasia	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	2	0·01	
VIII.—Diseases of the Skin and of the Cellular Tissue																					
Senile Gangrene	...	...	...	...	...	...	...	...	1	...	...	1	...	2	2	4	2	6	0·03		
Gangrene, other types	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	2	1	3	0·01		
Phlegmon, Acute Abscess	...	3	...	...	...	...	...	...	...	...	...	2	1	...	...	2	4	6	0·03		
Diseases of the Integumentary System :—																					
Ulcer, Bedsore	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2	3	0·01		
Eczema	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	0·01	
Other Diseases of Integumentary System	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	0·01	
Carbuncle	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	0·00	
IX.—Diseases of the Bones and of the Organs of Locomotion.																					
Diseases of the Bones	...	...	...	...	1	2	2	...	...	...	...	...	...	...	...	...	2	3	5	0·02	
Other Diseases of Locomotor System	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·00	
Disease of the Joints	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	0·00	
	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	0·00	
X.—Malformations.																					
Congenital Malformations :—																					
Congenital Hydrocephalus	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	0·01	
Congenital Malformation of Heart	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	0·01	
Other Congenital Malformations	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	4	8	0·04	
XI.—Diseases of Early Infancy.																					
Premature Birth	48	53	...	...	...	...	...	...	...	...	...	...	...	...	...	...	48	53	101	0·53	
Infantile Debility, Icterus, and Sclerema	17	26	1	...	...	...	...	...	...	...	...	...	...	...	...	...	18	26	44	0·23	
Infantile Atrophy, Debility, and Marasmus	14	6	...	2	...	...	...	...	...	...	...	...	...	...	...	...	14	8	22	0·11	
Icterus Neonatorum	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	0·01	
Want of Breast Milk	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	0·00	
Other Diseases peculiar to Early Infancy :—																					
Diseases of Umbilicus, etc.	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	0·01	
Atelectasis	8	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	2	10	0·05	
Injuries at Birth	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	4	0·02	
XII.—Old Age.																					
Senile Dementia	...	...	...	...	...	...	...	...	...	...	...	...	1	5	3	5	4	9	0·04		
Senile Decay	...	...	...	...	...	...	...	...	...	...	...	...	1	68	83	68	84	152	0·80		
XIII.—Affections Produced by External Causes.																					
Suicide	...	...	...	...	...	...	...	1	1	5	...	6	2	...	...	...	12	3	15	0·07	
Other Acute Poisonings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	0·00	
Violence	...	3	2	1	2	4	4	8	3	16	3	33	3	30	1	10	8	105	26	131	0·69
Execution	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	0·00
XIV.—Ill-defined Causes.																					
Syncope (aged 1 and under 70)	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	3	3	0·01	
Heart Failure (aged 1 and under 70)	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	2	3	4	0·02	
Other Ill-defined Causes :—																					
Atrophy, Debility, Marasmus (aged 1 and under 70)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	0·00	
Teething	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1	1	2	0·01	
Pyrexia	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	0·00	
Other Ill-defined Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	0·00	
Cause not specified	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	0·00	
All Causes	266	257	67	80	58	65	61	52	70	62	219	169	356	249	318	295	1415	1229	2644	14·0	